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### An Address.<sup>1</sup>

By JOHN A. CAHILL,

Retiring President, Victorian Branch, British Medical Association, Melbourne.

It has been a great pleasure to me tonight to instal Dr. Roseby as President of the Victorian Branch of the British Medical Association for the ensuing year. He has been a member of the Council for the last twenty-six years and has been a most consistent worker in the interests of the profession. He well deserves the honour attached to the position to which he has been elevated.

I desire to thank the members of the Executive and of the Council for the support they have accorded me in what has been a rather strenuous year. I wish also to record my thanks to Dr. C. H. Dickson and his office staff for the assistance they have so often been called upon to give me. From the news letters—introduced this year—THE MEDICAL JOURNAL OF AUSTRALIA and the annual report, you have gathered, I presume, a knowledge of what has kept us busy.

#### The Housing Problem.

During the year there has been much discussion, both verbal and written, regarding the "future of the medical profession", "reorganization of the profession", "medical planning" *et cetera*, but before any external authority makes any attempt to regiment or reorganize our profession there is much that should be done by way of obviating at least some causes of the ill health that today calls for curative medicine. The people of this country should be guaranteed the basic necessities of life in terms of food, housing, clothing and recreation in return for honest work, with a safeguard against interruption of income.

<sup>1</sup> Read at the annual meeting of the Victorian Branch of the British Medical Association on December 1, 1943.

The aim of any health service should be to produce and maintain a nation so healthy that it is capable of maximum production, thereby becoming both prosperous and contented. Everyone knows that poverty and bad environment undermine health of body and mind.

Staring us in the face in many of the inner industrial suburbs is a low and inadequate standard of living associated with bad housing and over-crowding, imperfect supply of air, light, space and water, ignorance in regard to hygiene, food and drink, evasion of the problems presented by sex and heredity, lack of leisure and recreation, and last, but by no means least, the prevalence of dirt and dirty habits. On the mental side, equally obvious are lack of social security and all the nervous strains and anxieties directly due to this and to physical and environmental factors. Hundreds of children live in the thick of it all. There is scarcely a house without its quota of children. Vice, crime and drunkenness are part of their normal environment. Heredity has already given many of them a bad start in life and environment has taken them the rest of the way to being potential liabilities of the State, as criminals, invalids or lunatics. In the worst cases the children are removed to charitable homes, but that in itself cannot solve the slum problem while the source of supply remains untouched.

Not all the inhabitants of these places are vicious. Many of them are only poor, while others are merely reckless and dirty. Their homes show no sign of the homely instincts of cleanliness and comfort. Some of them have been born and bred in slum conditions, and they would probably make a slum for themselves no matter where they were. They lack education; they know no better and most probably have never had a chance. There are others who, having been driven to the slums by poverty, have despaired and just "let themselves go". Some, no doubt, are incorrigible, but most, I should say, are still amenable to the corrective effects of an improved environment with perhaps guidance and education in domestic economy.

Notwithstanding the work that has been done by the Victorian Housing Commission during the few years of its

existence, in demolishing substandard tenements and rehousing many of the occupants, I am afraid the number of persons living in some localities under slum conditions is greater than ever. Some people have refused to leave the district in which they have been accustomed to live, and have sought and obtained accommodation in what are known as "apartment houses". These apartment houses are usually old, often large, and have been in days gone by what were regarded as good one family houses. The rooms have been divided up, balconies enclosed or partly enclosed and various alterations made without any regard to ventilation or sunlight. The cooking facilities are at best makeshift. The whole idea of the tenant (who very often rents more than one, sometimes half a dozen of these places, and lives elsewhere) seems to be to sublet as many rooms as possible and make a substantial sum over the rent he pays. Old delicensed hotels have become a terrible menace. A great amount of time and money has been spent on regulations to control new buildings, but little or no attention has been given to conditions in these old buildings.

As a medical officer of health I have had many opportunities of seeing the appalling conditions under which some people are forced to live and which some apparently prefer. The filth in some of these places, unless seen, is unbelievable.

All these people have a right to live under decent conditions, or at least to be given the opportunity. By decent conditions I mean housing with modern amenities. But what are the difficulties?

Here are some of the problems that present themselves:

What to do with the dirty and vermin infested? Most of their shelters (the majority of them could hardly be regarded as houses) in the interests of public health demand demolition. But what are you going to do with the occupants? In Holland "undesirable tenants" are admitted to the new estates only after spending twelve to eighteen months, or until they have acquired satisfactory ways of living, in special probationary centres. In these centres there is communal accommodation including nurseries, wash-houses and communal bathrooms. Those in charge of this work claim that these schemes are a great success.

In January last the Royal College of Physicians, London, suggested special houses with concrete floors, impermeable walls, simple fittings, and built without places where vermin might lurk, as a solution of the problem of tenants who make a slum of any premises they occupy.

The memorandum was drawn up at the request of the Ministry of Health's Central Housing Advisory Committee.

The College recommended a rigid daily inspection by local authority officers. Satisfactory tenants could go on to more comfortable houses, and tenants who failed to make good in the new houses could be evicted and offered special grade houses.

The memorandum, which was signed by the President, Sir Charles Wilson, who is Mr. Churchill's physician, adds that the houses should not be regarded as penal settlements, but as places for education, supervision and management.

In Birmingham, England, the presence of vermin in houses is dealt with by the Department of the Medical Officer of Health. The furniture of tenants who are about to be moved to new houses is put into special vans, of which there are three, each capable of holding the furniture of two families. The vans are taken to a fumigating station owned by the Corporation, where they are treated with hydrocyanic gas for two and a half to three hours and then with hot air for two hours. All soft goods—pillows, sheets, bedding, clothes—are disinfected by a steam process. The system is capable of dealing with four to six houses per day. In Leeds there is a similar system. Their plant is capable of dealing with sixteen households per day.

What are we to do with persons living alone who go to work every day? Most of these are good citizens and keep their dwellings clean and in good order, but the surrounding areas are mostly insanitary and unhealthy. These

people are usually not prepared to sacrifice their independence. They do not like hostels.

We have also the pensioners and the elderly persons of limited means. These comprise both single men and women and married couples. On account of their age and health many of these old people are not always able to take care of themselves and should be under the supervision of a trained nurse.

Then there are the families who have been accustomed to lower living standards and who cannot appreciate modern amenities. They may be small or large families.

Transport, fares, market and shopping facilities have also to be considered, and if you are going to rebuild on the sites at present occupied by the people you intend to relieve, how are you going to accommodate them in the meantime?

All the substandard houses are not in one lot. Very often they are between houses which, though not modern, are still decent homes. Demolition of the substandard one leaves an allotment which becomes a liability for the owner inasmuch as he is liable for rates and taxes until an adjoining owner may see fit to acquire it. It is too small to meet the requirements of present-day building regulations and is very often converted into a rubbish tip by persons living in the neighbourhood.

The Housing Investigation and Slum Abolition Board in its report 1936-1937 on slum reclamation and housing for the lower paid worker, stated that the problem of the slums was essentially the problem of poverty. It pointed out in its report that the problem of the slum dweller is largely the problem of the tenant who is unable, by reason of his low wage earning or the number of his dependants, to pay the full economic rent of a dwelling affording reasonable standards of comfort and decency. Economically, it said, the slum problem is the wage problem, and a solution must be found by either increasing the earnings of the persons concerned and/or by providing lower rental dwellings. The economic thrust consequent on intermittent employment, lack of employment, sickness and other like causes, has forced and condemned a large section of the lower paid workers and others to seek shelter at rentals within their very limited capacity to pay.

The Board found that the majority, 64.7%, of the male occupiers of slum dwellings were unskilled workers, 17% were skilled workers and 18.3% were pensioners.

Providing decent living accommodation for those who cannot without assistance obtain it at rents within the means of their often fluctuating but never high wage incomes, has been one of the greatest social problems facing most European countries for many years. Among many, the provision of good housing has been regarded as one of the basic necessities of any kind of social reform, and during the period between the two Great Wars, unprecedented efforts were made by governments and municipalities of every political view to satisfy the demand of the times for the recognition of the right of everyone to live under decent conditions. Great or small as these efforts may have been, no one would suggest that their results have been adequate. Notwithstanding all that has been done, housing remains one of the most acute problems of social reform.

When discussing the various housing schemes that have been introduced, it is necessary to appreciate the difference between: (a) a housing scheme—the provision of additional houses at a full economic rental of which the State Savings Bank scheme at Port Melbourne is an example—and (b) housing for slum reclamation. This involves: firstly, the removal of insanitary dwellings and the replanning and perhaps the rebuilding of the area, and secondly, the provision of hygienic and decent dwellings at a rental within the capacity of the lower paid worker—a rental which in most cases will be less than the normal economic rent.

Leading English authorities state that owing to this misconception of the problem many hundreds of millions of pounds of public moneys have been spent on housing without any noticeable inroads on the slums being made. In England several phases of subsidized building have

followed each other, but under the *Housing Act, 1933*, subsidies for all forms of housing were withdrawn, although financial assistance for slum clearance remained.

Being a medical officer of health (part time) and connected with a municipality upon which the spotlight is often turned (we often get the credit of crimes that occur outside our boundaries), I have taken perhaps more than an ordinary interest in the problem on which I am speaking, so, when abroad in 1937, I made it my business to ascertain what was being done elsewhere. In New York I was fortunate in having an architect friend who had been connected with some of the biggest undertakings in that city, and through him I was able to see and learn a great deal. In London I was again most fortunate. There I was able to obtain what was then up-to-the-minute information on housing schemes in London, Birmingham, Liverpool, Leeds, Paris, Lyons, Amsterdam, Rotterdam, Stockholm, Copenhagen and Barcelona. Since then I have been told of the great work that was done by President Cardenas in Mexico, who during his term of office embarked on a vast programme of housing reform, and saw that the Government's efforts were directed to housing the low wage earner. Ingenious planning and the wise use of materials made it possible to build attractive homes for a very low rental. A study of the block plan of one of Mexico City's many housing projects shows how well cared for are the children in the matter of organized recreation.

Information is now available regarding what has been done or attempted in several other countries. In Australasia we find New Zealand grappling with the problem and doing excellent work, and New Zealand can now look with pride on its twenty thousand low-rent homes. The Australian States are also at work, but their small scale approach to the housing problem has prevented them from taking advantage of many new developments in housing technique. The Victorian Housing Commission has built 1,342 homes in Victoria, while the administrative expense of the Commission to date is approximately £40,000.

While I recognize the amount of work that has been done by the Victorian Housing Commission and appreciate its difficulties, slum conditions as I still meet them are a real nightmare.

What appears to me as the primary need in relation to housing is that there should be set up without delay a properly constituted planning authority with ample statutory powers, and that this body, on the advice of experts, should formulate master plans for the future development of the metropolis and for other areas. The housing problem, particularly in the inner metropolitan areas, is of such great extent and urgency that a central planning authority should be already at work.

Recent efforts to improve housing conditions are utterly inadequate. They have been executed without reference to any properly coordinated plan for regional and local development and without adequate provision for social amenities and needs. Why does the Government not bring out from England one of those experienced housing experts to advise on our approach to the post-war housing programme? I consider it would be well worth while inviting a man like Mr. L. H. Keay, O.B.E., F.R.I.B.A., of Liverpool, and now is the time to do it.

From the point of view of healthy living the metropolitan area of Melbourne has become overgrown and sprawling, involving burdensome daily travel and fatigue for many citizens and making access to open country increasingly difficult.

It is widely recognized that for a well-planned city there is an optimum size, having regard to the cost of services and health conditions for the services. Melbourne has already outgrown this size, and from the point of view of the wise use of land is regarded by many as possibly the most wasteful city in the world. They consider any further expansion of Melbourne to meet housing needs should not be permitted. Liverpool, with a population of 856,000 (1931), covers 27,521 acres; Birmingham's population, 1,024,000 (1935), occupies 51,147 acres; while Melbourne's population is approximately 1,120,000 and spreads over approximately 126,000 acres.

Although the ideal home for a family may be one with sufficient bedrooms, all modern amenities, plenty of light and ventilation, well spaced from its neighbour garden *et cetera* (some prefer not to have a garden) and in an outer suburban area, we have to consider the question of a considerable army of casual workers who must live within a short distance of our waterfront and railway terminal. To meet the need of these workers, it would appear that flats are the only answer.

I do not mean flats of the type we see about Melbourne, but something resembling the workers' flats of Stockholm, Sweden—flats in parallel blocks with plenty of space between them, no courtyard and limited to two rooms in depth so as to get a maximum of sunlight into each room. If these blocks were built here so that they extended in a north-westerly and south-easterly direction, every room would be subject to the direct rays of the sun at some time of the day. There are many schemes worthy of study and consideration.

Housing data from overseas countries clearly show that building costs in the communal dwellings are substantially less than costs associated with the building of cottage homes. European figures place the difference as high as 40%, but Britain, however, has not been able to achieve such savings owing to the more generous planning of workers' flats.

Apart from the great advantage of lower rentals, the communal form of housing offers other advantages to the worker, to the housewife and to the children living in these communal blocks. The worker has the great advantage of being within walking distance of the employment market. The housewife has numerous benefits that are not possible in the cottage home. The two outstanding comforts are central heating and an abundance of hot water, services that are possible only in communal housing. Modern, well-equipped laundries reduce the drudgery of the weekly wash and eliminate entirely the backyard clothes line with its winter drying problems.

Communal recreation facilities are now part and parcel of all large workers' flats in Great Britain and Europe. Social services under the different schemes vary a good deal, but the apparent aim of all is towards a healthy and contented people. Some London housing organizations run nursery schools and clubs. On the ground floor of one block is a large club room with stage at one end and canteen at the other, a women's workroom, with sewing machines *et cetera*, and a fitted workshop for men. In another block there is a club room for boys and girls of fourteen years and over; both clubs open on to a garden terrace. There is also a nursery school and a fitted sports ground and playground.

In recent years, New York built thousands of homes for wage earners. Slums were torn down and in most cases big blocks of flats at low rentals put up. In some of those, workers were provided with amenities such as had hitherto been enjoyed by the well-to-do, and, in some cases, not even by them. Central heating, refrigerators, hot water, labour-saving kitchens, central laundries with washing machines and drying rooms, sun balconies, children's playgrounds and even wading pools for the little ones. In Vienna flats were built in groups round the communal lawns or garden. They had their own crèches, nursery school and sometimes their own community hall, theatre or cinema. They often had their own library. These things, generally speaking, were designed to weld the flat dwellers into a real community. Something of that nature is now being sought by many of those who have here, for the last couple of years, been engaged in air-raid precautions work, and would no doubt be welcomed by a great number of those people from all classes—hitherto strangers to one another—who have been brought together in various activities connected with the war.

A few moments ago I referred to the problem of housing persons living alone—bachelor men and bachelor women—of independent spirit now living in a slum area. I do not see why these should not be accommodated in the block type of flat with the number of rooms limited to their requirements. In many British housing schemes provision has been made for them—a room with bed alcove and



cooking recess. This, however, is not permitted under our regulations.

Queensland's "Chermside" garden settlement in Brisbane seems to have solved the problem of pensioners and elderly persons of slender means. Here the elderly couples are housed in small cottage units (containing bedroom, sitting room, bathroom and veranda) all in a garden setting. The cottages give privacy and comfort and the tenants have their garden strips. There is a central building containing communal dining room, kitchen, laundries and accommodation for matron and staff. There is also a hostel for single pensioners. All meals are served in the central building, except in case of illness or severe weather conditions, when meals are taken to the cottages. I understand a scheme of this kind has been designed here to provide for 80 to 100 persons, such scheme to be carried out in garden settlements on cheap land in outer areas, and also, where necessary, in country towns. There is no transport or employment problem.

Now with regard to rentals. Generally the tenants of substandard houses are in receipt of family incomes less than the basic wage.

The State Housing Commission of Victoria, under the *Slum Reclamation and Housing Acts, 1937-1938*, may let or lease any of its houses to any "person of limited means" who, in the opinion of the Commission, is unable to secure suitable housing accommodation. The Commission must, however, have regard to: (a) the existing housing accommodation of such person; (b) the availability of other suitable accommodation at a rental within the means of such person; (c) the number of children living with such person; and reasonable preference is to be given to persons displaced from substandard houses.

The act does not define the term "person of limited means". It has been assumed by the Commission that when the total family income of a man, his wife and three children amounts to the basic wage or less he is a "person of limited means".

The Commission bases rentals on the economic rental of the house, with provision for "rental rebates" having regard not only to the family income, but also to the number in the family. Economic rentals are approximately 6.5% of the capital cost of the house, land and all services, and include provision for interest, sinking fund, insurance, maintenance and municipal and other rates.

When an application for a rebate of rent is made, the actual total family income, that is, the total weekly income of all members of the family, is ascertained and calculations are then made to determine the rebate.

In Stockholm, Sweden, under the 1935 scheme for housing large families, a grant was made for "family allowances". These are calculated to reduce the rent by 30% for families with three children (under sixteen), by 40% for families with four children, and by 50% for families with five or more children, the calculations being made on a standard rent fixed for each flat by the State Building Loan Bureau.

Good housing alone will not be sufficient to ensure decent living. The worker must be in receipt of a wage or income sufficient to meet his responsibilities, allowance being made for food, clothing, fuel, sickness, unemployment and irregular work. Many families will need to be taught how to live and to make the best use of the amenities placed at their disposal.

What I have endeavoured to do tonight has been to bring before you one of the very great causes of ill health as seen by a medical officer of health, namely, slum life—low and inadequate standard of living—caused by bad housing, over-crowding, poverty *et cetera*, a condition of affairs that calls for urgent alleviation. I have attempted to give you an idea of what has been done in Great Britain, in Europe and elsewhere. I have told you what has been done here in Victoria, but what I want particularly is for you to realize that in spite of glowing reports that appear in the Press from time to time, quoting the number of houses that has been built and is being built, by the Housing Commission, the number of people in some localities living under slum conditions is not appreciably diminishing. Nothing short of reclamation and demolition will effect a

clearance. It may be costly, but the health of the people should be the first consideration. But where is that central planning authority? Where is that master plan?

#### Conclusion.

Before I conclude, I desire to remind you that much of what concerns us, with regard to our future, is being discussed at the present time. The National Health and Medical Research Council is sitting in Canberra. The Ministers of Health of the different States are meeting on the sixth instant and various conferences have been or are about to be held in the Federal Capital. It seems likely that something important may emanate before the end of the year. Keep your eyes on Canberra. Watch the Press reports. Study carefully every proposal that is put forth, and discuss them not only with your fellow practitioners, but with your friends, and when opportunity presents itself, with business men of your acquaintance. Regard nothing as inevitable. Look at every proposition from every possible angle, so that you may become fully acquainted with its implications, and be ready, when the agenda for Convocation are eventually put before you, to give to your delegates instructions, the result of free, frank and deliberate discussion.

Remember, too, that priceless heritage of freedom you have hitherto enjoyed and be careful that what in the beginning may appear to be but nominal control, may eventually lead you speciously into bureaucracy.

As I said on a previous occasion, this is a time when we must be united. In our Federal Council I have every confidence and consider it the bounden duty of every member of the profession not to accept any position under any scheme which has not its approval.

One word more and I have done.

May I ask you to refuse steadfastly to allow the implementation, in part or in whole, of any scheme materially altering our present method of practice, until such time as the members of the profession with the forces, and especially those unfortunate individuals in the hands of the enemy, have all returned to their homes, and have had ample opportunity of studying and assessing for themselves their future prospects in the profession and in a world that may be profoundly altered.

#### PAIN IN THE CHEST: OBSERVATIONS ON THE USE OF LOCAL ANÆSTHESIA IN ITS INVESTIGATION AND TREATMENT.<sup>1</sup>

By MICHAEL KELLY,

Captain, Australian Army Medical Corps,  
Perth, Western Australia.

In the majority of cases of pain in the chest, no signs of visceral disease are found, and the physician will make a diagnosis of pleurodynia, or intercostal neuralgia. The pain is made worse by breathing or coughing, and sometimes by movements of the arm or the trunk. The pain as a rule is unilateral, and may shoot from the back around to the front; in every case it is diffuse and difficult to locate, seeming to spread over an area variable in extent. Often the patient will complain that the chest is tender, and examination by palpation will confirm this. In other cases tenderness of the chest wall is not easily demonstrable, though the pain may be severe.

#### Intramuscular Fibrositis.

According to the orthodox authorities, pleurodynia is an intramuscular fibrositis. Stockman (1920) states that intramuscular fibrositis is characterized by pain and stiffness in the affected muscles. At first, the pain and tenderness are severe and the muscle is oedematous. Later an inflammatory hyperplasia of the connective tissues supervenes, forming indurated patches, which at first are oedematous and vascular. Later they become tougher and form palpable nodules consisting of white fibrous tissue lying in an amorphous matrix, with varying amounts of sero-fibrinous exudation and thickening of the walls of the small blood-vessels.

<sup>1</sup> Accepted for publication on December 4, 1942.



Intramuscular fibrositis, according to Stockman, may be acute or chronic. The acute type is liable to recur and to become chronic, while in some cases it is chronic from the outset. In the chronic type the main symptoms are aching and stiffness, and the muscle is easily fatigued.

Ray (1934) holds that the nodules are not easily discernible, and he states that intramuscular fibrositis should be thought of in terms of hypertonic muscles and tender areas rather than of nodules.

#### Recent Advances.

In recent years the use of local anaesthesia has shed a good deal of new light upon fibrositis, and on the nature of somatic pain in general. It is generally accepted now that the essence of fibrositis is a circumscribed lesion situated in muscular tissue, which can be recognized as a strictly localized point of tenderness. Such a minute lesion often will be responsible for a poorly localized pain referred to a wide area. In addition, secondary tenderness of the deep structures may be demonstrable over a greater or lesser area surrounding the lesion. That this tenderness is secondary to the main lesion is proved by the fact that the injection of local anaesthesia into the lesion abolishes, not only the spontaneous pain, but the referred tenderness as well.

Experimenting upon themselves and upon their colleagues, Lewis and Kellgren (1938) found that muscular tissue was insensitive to ordinary stimuli, such as puncture with a fine needle; diffuse pain of an unpleasant character, however, could be produced by injecting minute amounts of hypertonic saline solution into the muscle. The pain would spread over a wide area, and frequently it was noticed that the deep tissues in this area became tender to pressure. When the injection was made into the paravertebral muscles in the dorsal region, the pain often was observed to radiate to the front of the chest on the same side. With injections into the intercostal muscles similar results were obtained. The effect of the hypertonic saline solution lasted for only a few minutes, and upon the disappearance of the pain the referred tenderness was observed to disappear.

These observations suggest that the pain and tenderness of fibrositis result from a local nervous reflex, by which the tissues liberate a substance which renders them tender to pressure. Earlier experiments upon the skin performed by Lewis (1936, 1937) indicate that this nocifensor, or trophic, nervous reflex often is accompanied by the "triple response", or reflex hyperemic flare, proceeding in susceptible cases to whealing or oedema. A similar response in the deep tissues to an intramuscular fibrositic lesion would be sufficient to explain all the observed facts regarding fibrositis.

It follows that the investigation of a case of pleurodynia should include a careful search for localized points of deep tenderness. This search, however, is made more difficult by the presence of referred tenderness.

#### Pleurodynia in Practice.

The pain of pleurodynia may be acute or chronic. The acute variety may clear up or merge into the chronic. It is particularly common in the early days of an attack of influenza or other acute infectious disease.

The lesion of pleurodynia may be single, or it may be one of several lesions in a generalized attack of fibrositis. It is common after an injury to the chest wall, and when the post-traumatic lesion has formed, it is indistinguishable in its behaviour from the lesion of non-traumatic origin. It often happens that the chest remains only slightly painful for a variable time after an injury, and later suddenly becomes a great deal worse. (This is a frequent happening with post-traumatic fibrositis elsewhere.)

When the pain is felt chiefly in the back, the lesion as a rule will be found deep in the paravertebral muscles, or in an intercostal space near the angle of a rib. In these cases the pain often will be felt in front also. When the pain is felt laterally or in front, however, the most likely site for the lesion is an intercostal space at the side or anteriorly. With experience a certain facility is acquired in identifying the true lesion, the tenderness of which is more acute as a rule, and which has a predilection for certain situations.

Because of the ease with which movements of the ribs can be reduced to a minimum with adhesive plaster, pleurodynia is particularly amenable to relief by strapping. In many cases the pain disappears in a day or two with or without treatment. If the pain shows no signs of abating after a few days, the lesion should be infiltrated with a few cubic centimetres of a local anaesthetic agent. Because of the presence of referred

tenderness, the error of injecting the wrong spot will sometimes be made; but the practitioner should persevere until the true lesion is discovered and treated. The signs of successful treatment are unmistakable; all pain on movement or on coughing suddenly vanishes, and the referred tenderness is observed to disappear.

In the majority of cases the relief is permanent, but in some a second injection is found to be necessary after four to seven days.

#### Reports of Cases.

Infiltration of the lesion has been performed successfully in 35 cases; this is about half of the total number of cases in which observations were recorded. In the large majority of the remainder, however, no injection was given.

CASE I.—Mrs. M.B. had suffered from various rheumatic disorders for many years; now she complained of severe pain in the left side of the chest, of ten days' duration. The pain was much worse on breathing deeply or on movements of the trunk. On examination, some diffuse tenderness of the costal margin on the left side was present. A localized point of acute tenderness was found close to the costal margin in the seventh intercostal space (Figure I). Infiltration caused a stab of severe pain, followed by immediate and permanent relief.

CASE II.—D.J.C. complained of a pain on the right side of the chest, which had followed a blow received some six months previously. It had amounted only to a slight discomfort; but it had been greatly intensified by an attack of influenza a week previously. The pain was worst on deep respiration, on coughing, or on movement of the right arm. An oval area of tenderness, with its long axis along the fifth intercostal space, was found beneath the right nipple. Two suspected lesions were infiltrated without success. Six days later the pain was worse. The lesion was identified in the fifth intercostal space at the anterior axillary line, at the rear pole of the oval area of referred tenderness (Figure I). Treatment abolished the pain and the larger area of tenderness, and a permanent cure resulted.

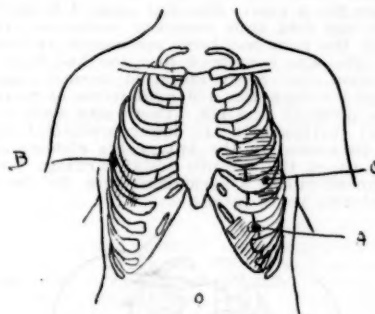


FIGURE I.

A—lesion in Case I. B—lesion in Case II. C—lesion in Case IX. Oblique hatching—areas of referred tenderness. Horizontal hatching—area in which friction rub was heard in Case IX.

CASE III.—Sergeant E. had been run over by a motor-truck some four weeks before; he sustained a fracture of the left scapula and of several ribs on the left side. He continued to complain of pain in the region of the left shoulder-blade which shot around to the front. It prevented him from raising the left humerus to the horizontal position, and it kept him awake at night. On examination, asymmetry of the chest was present, with prominence of the left side in front. A tender spot was found in the eighth intercostal space, adjacent to the inferior angle of the scapula (Figure II). Deep infiltration relieved the patient's pain, and he could raise the humerus above the horizontal position. A week later the pain had not returned.

CASE IV.—Lieutenant McK. complained of pain in the right side of the chest of four days' duration; he was sent to hospital with the diagnosis of pleurisy. Four days after his admission no improvement had taken place. He complained that the pain shot around from the back, and it was worse on movement of the shoulder. A lesion was found in the paravertebral muscles at the level of the fifth dorsal

vertebra (Figure II). Deep infiltration caused instant relief, and he returned to duty two days later. The pain did not return.

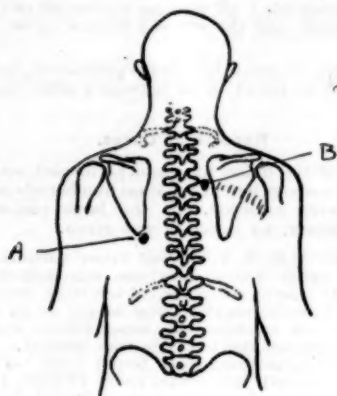


FIGURE II.

A—lesion in Case III. B—lesion in Case IV. Hatching—area to which pain was referred in Case IV.

When the pain is on the left side of the chest, the patient often fears heart disease. For this reason, it will be found that those complaining of pain on the left side considerably outnumber the remainder. Paul White (1941) considers that the pain frequently associated with the "effort syndrome" is myositis in origin. After careful examination in several such cases I have failed to find a somatic lesion. Left-sided lesions often cause the patient to worry a good deal; but the full syndrome has not developed, and successful treatment or reassurance as a rule will satisfy the patient. In a previous paper (1941) I have reported two such cases. The following is another example:

CASE V.—Mrs. L.D. had had intermittent pain in the precordial region for a year. She first noticed it shortly after her husband had died from coronary occlusion. When she consulted me the pain had been continuous and severe for four days. She was convinced that she had heart disease. On examination, the heart appeared normal, though her systolic blood pressure was 170 millimetres of mercury and her diastolic pressure was 110. There was some tenderness of the costal cartilages in the lower precordial region. A lesion was discovered in the left *rectus abdominis* muscle, close to the tip of the seventh costal cartilage (see Figure III). Treatment caused a permanent cure, for the pain had not returned two years later.

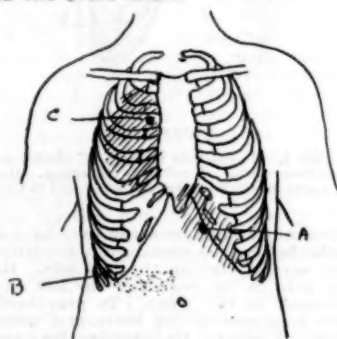


FIGURE III.

A—lesion in Case V. B—lesion in Case VI. C—lesion in Case VII. Oblique hatching—areas of referred tenderness. Stippling—site of old herpetic rash in Case VI.

In Case VI, post-herpetic neuralgia was relieved by treatment of a muscular lesion.

CASE VI.—E.G. had had pain in the right side of the chest for three weeks. It had commenced with a painful rash. The pain was worse on trunk movements. On examination the marks of an old *herpes zoster* eruption were seen on the lower part of the right side of the chest, extending to the right upper abdominal quadrant. A tender spot was found in the tenth intercostal space, near the costal margin in

the anterior axillary line (Figure III). Local anaesthesia abolished the pain immediately and permanently.

Frequently an attack of bronchitis or pneumonia is ushered in by pain in the chest, though no signs of pleurisy can be detected on examination. The pain usually is transient, passing off in twenty-four to forty-eight hours, and the use of local anaesthesia usually is unnecessary. I have carefully examined the patient in several such cases, and have found an acutely tender spot situated in an intercostal space often surrounded by an area of less acute tenderness. This tenderness is of the deeper structures only, for no abnormal sensitivity is detected on pinching the skin. In other cases pain in the chest persists for some time after an attack of pleurisy or pneumonia, when all physical signs have disappeared. Button (1940) records one such case, in which treatment by local anaesthesia was successful.

CASE VII.—Private T. was admitted to hospital on October 7, 1941, with severe pain in the right side of the chest of three days' duration. He had a high temperature and a severe cough, but no adventitious were detected in the chest. The pain was severe, and the patient suffered great agony, especially on coughing or moving. Morphine in large doses gave little relief. On October 10 examination revealed widespread tenderness of the deeper structures of the chest wall in front. The skin was not excessively tender. Careful examination revealed that the tenderest spot was situated in the space between the second and third costal cartilages (Figure I). The injection of one cubic centimetre of a local anaesthetic agent caused a momentary stab of severe pain, followed by complete relief. For a few days the chest felt "bruised", but no more pain was felt.

CASE VIII.—On July 11, 1941, Mrs. J. R. complained of severe pain on the right side of the abdomen, which had lasted for three weeks. She had suffered on previous occasions from rheumatic complaints. The right side of the abdomen was extremely tender, but there was no rigidity. Her appendix had been removed three years before. She was admitted to hospital for observation, and three days later her temperature began to rise and a cough to develop. On July 17 crepitations were detected at the base of the right lung; the percussion note was dull. The pain had not lessened in intensity. On July 22 the temperature had fallen, the cough had lessened and the signs at the base of the right lung had resolved. On July 28 the pain was as severe as ever; it seemed to shoot around to the front along the costal margin. Injection of several tender spots gave little relief. Four days later the pain was abolished immediately upon infiltration of a lesion situated close to the tip of the eleventh rib. The pain, which had not abated for five weeks, did not return.

Orthodox medicine teaches that the pain of dry pleurisy is due to the rubbing together of two surfaces roughened by fibrinous exudate. Case IX suggests that the pain in some cases is due to a muscular lesion.<sup>1</sup>

CASE IX.—Corporal B. complained of a pain in the left side of his chest following an attack of influenza a week previously. The pain had been more acute for twenty-four hours; it was made worse by trunk movements, but coughing and deep respiration were borne more easily. On auscultation, loud pleuro-pericardial friction was heard in the region of the apex beat, and pleural friction was heard over a large area external to this. A tender spot was found in the fifth intercostal space two inches outside the nipple line; no wide area of referred tenderness was found (Figure I). An injection of one cubic centimetre of a local anaesthetic agent into the tender spot completely abolished the pain, which did not return, though the friction rub was in evidence for three days longer.

#### Discussion.

Kellgren has called attention to the similarity between somatic and visceral pain. So close is this resemblance that he holds that the somatic pain nerves belong to a system closely related to the visceral sensory nerves. The foregoing observations, and those of several other workers, suggest that somatic and visceral lesions may be linked in an association more intimate than is generally suspected. The question of cutaneous pain is not involved, for in the vast majority of cases there was no abnormal sensitivity of the skin. In a few cases itching and patches of hyperaesthesia were associated with muscular lesions; these are recognized manifestations of fibrositis when it involves the subcutaneous tissues (panniculitis).

<sup>1</sup>Sir James Mackenzie ("Symptoms and Their Interpretation" 1920) considered that the surface of the parietal pleura was insensitive. The severe pain of pleurisy, he said, was due to the painful contraction of the intercostal muscles.

With pain in the chest, as with abdominal pain, headaches and pains elsewhere in the body (Kelly, 1942), abnormal sensitivity of muscle seems to play an important part. Whether this association has any deeper significance future researches doubtless will prove. To me it appears likely that the muscles will be proved to play a large part in the mechanism of the production of the spontaneous pain of disease. The use of local anæsthetic agents in small amounts offers a diagnostic weapon of great accuracy in locating the seat of the pain, and frequently the relief is permanent. Neal Smith (1942) is a recent writer who claims to have achieved permanent relief of the pain by local anæsthesia in a series of cases of fractured ribs. The good results he attributes to the allaying of localized muscular spasm.

The association of dry pleurisy with a muscular lesion should not be surprising in view of the nature of fibrositis. Intramuscular fibrositis is characterized by edema, and Ray states that pleurodynia is frequently accompanied by subcutaneous induration. In at least two cases of the present series, swelling in the intercostal spaces was visible to the eye. The same process spreading inwards would involve the parietal pleura and give rise to a fibrinous exudate. Tidy (1942) has observed that dry pleurisy is often the only physical finding in epidemic myalgia with pain in the chest. He points out that it would be a tragedy to label such patients as tuberculous; perhaps this judgement applies equally to the general assumption that dry pleurisy is tuberculous in origin unless proved otherwise.<sup>1</sup>

#### Summary.

1. The essence of pleurodynia is a painful lesion of the muscles, surrounded by a fibrositic reaction.

2. In the majority of cases a cure results from the infiltration of the lesion with a local anæsthetic agent.

3. When pain in the chest is associated with physical signs of disease of the lungs or pleura, the pain can often be relieved in the same fashion.

4. These and earlier researches suggest that the muscles play an important part in the production of the spontaneous pain of disease.

#### Bibliography.

M. Button: "Muscular Rheumatism: Local Injection Treatment as a Means of Rapid Restoration of Function", *British Medical Journal*, Volume II, 1940, page 183.

J. H. Kellgren: "A Preliminary Account of Referred Pain Arising from Muscle", *British Medical Journal*, Volume I, 1938, page 325; "Observations on Referred Pain Arising from Muscle", *Clinical Science*, Volume III, 1938, page 175.

M. Kelly: "The Treatment of Fibrositis and Allied Disorders by Local Anæsthesia", *THE MEDICAL JOURNAL OF AUSTRALIA*, Volume I, 1941, page 294; "Lumbago and Abdominal Pain", *THE MEDICAL JOURNAL OF AUSTRALIA*, Volume I, 1942, page 488; "Headaches, Traumatic and Rheumatic", *THE MEDICAL JOURNAL OF AUSTRALIA*, Volume II, 1942, page 479.

T. Lewis: "Experiments Relating to Cutaneous Hyperalgesia and its Spread through Somatic Nerves", *Clinical Science*, Volume II, 1936, page 373; "The Nocifensor System of Nerves and its Reactions", *British Medical Journal*, Volume I, 1937, pages 431 and 491; "Suggestions Relating to the Study of Somatic Pain", *British Medical Journal*, Volume I, 1938, page 321.

M. B. Ray: "Rheumatism in General Practice", 1934.

D. J. N. Smith: "The Treatment of Fractured Ribs", *British Medical Journal*, Volume I, 1942, page 383.

R. Stockman: "Rheumatism and Arthritis", 1920.

H. L. Tidy: "Dry Pleurisy and Epidemic Myalgia", *British Medical Journal*, Volume I, 1942, page 236.

P. Wood: "Da Costa's Syndrome", *British Medical Journal*, Volume I, 1941, page 767.

### INSECTS IN THEIR RELATIONSHIP TO INJURY AND DISEASE IN MAN IN AUSTRALIA.

#### SERIES IV.

By J. BURTON CLELAND, M.D.,

Marks Professor of Pathology, University of Adelaide.

The first paper of this series was contributed to the Australasian Medical Congress<sup>(1)</sup> held at Sydney in September, 1911, and the second to the Australasian Medical Congress<sup>(2)</sup> held at Brisbane in 1920. The third number of this series appeared in this journal<sup>(3)</sup> in 1931. Further references and notes collected since then form the subject of this paper.

<sup>1</sup>J. E. Farber (*American Review of Tuberculosis*, Volume XVII, May, 1943, page 469) reports that the method will give prolonged relief in more than half the cases of pain in the chest accompanying pulmonary tuberculosis.

I am indebted to Mr. H. Womersley, Entomologist to the South Australian Museum, for kindly supplying me with information as to the present correct official names for various species of insects and for help in other directions.

#### Siphunculata (Lice).

##### *The Pubic Louse (Phthirus pubis L.).*

Dr. S. Minogue,<sup>(4)</sup> Medical Superintendent of the Mental Hospital, Stockton, New South Wales, in 1935 referred to an outbreak of pubic lice, which spread through the ward and affected 19 male patients. The eggs were found to be very resistant to treatment. The pubic lice were found also on the axillary hair and on the hair of the body of hirsute patients and even in two cases on the hair of the head.

##### *The Biting Louse of Dogs (Linognathus setosus Olfers).*

K. C. McKeown<sup>(5)</sup> states that this louse "sometimes occurs in large numbers on dogs, and the parasites, temporarily transferring themselves to the owners of the pets, cause considerable irritation".

#### Orthoptera (Cockroaches).

##### *Polyzosteria limbata, "Bushbug".*

A. M. Lea makes the following statement about the "bushbug":

This large cockroach, commonly called the "bushbug" near Sydney, on being alarmed cocks its tail up and "micturates" for some distance. It was (probably still is) a common trick for boys to get a dog to attack one, with the result that the dog usually got an eye full, and could never be got to attack one a second time.

#### Homoptera.

##### *Jassids.*

A. M. Lea refers as follows to jassids:

To my surprise, when handling some minute Jassidæ that came to light in Adelaide this summer (1932), I received some bites; the stings were but slight, and when I first felt one I thought I must have been mistaken in the insect, but I actually saw them stinging a few minutes afterwards. The stings were too slight to raise bumps. I was previously unaware that any homopterous insect could bite.

#### Hemiptera (Bugs).

##### *Reduviidæ, Pirate Bugs; Nepidæ, Water Bugs.*

With regard to the Hemiptera, A. M. Lea makes the following remarks:

All of these can bite severely, much worse than the sting of a bee. Bugs of many other families can bite severely. The water-bugs (*Laccotrephes* spp.), called "water-scorpions", have often bitten boys when swimming in shallow muddy water. The large Nepidæ are well known to kill fish and frogs, and the bite of the introduced *Lethocerus indicus* Stal. (our largest water-bug), I have been told, is extremely painful. Mr. Hale tells me that many of his young fish are killed by back-swimming bugs.

##### *Oncoscorhis sulciventris, Bronzy Orange-Bug.*

A. M. Lea makes the following statement about the bronzy orange-bug:

When alarmed this large bug can "micturate" for some distance, and orange-pickers about Brisbane sometimes get a discharge in the eye from it. I never got a direct discharge in the eye; but on one hot day at Mt. Tambourine got a discharge on the hand, and wiping perspiration from my face shortly afterwards both eyes smarted a lot.

##### *Irritation of the Eyes from the Glandular Secretion of the Crusader Bug.*

The common crusader bug, *Mictis profana* Fabri, which has a Saint Andrew's cross in yellow or white on its back and feeds on acacias and the young growth of citrus trees, can discharge a jet of fætid, buggy-smelling fluid from glands situated at the extremity of the body. K. C. McKeown<sup>(6)</sup> states that this fluid can be squirted for a distance of several inches and causes great pain and irritation if it comes in contact with the eyes.



### Bugs and Fleas in 1832.

The diary of Richard Bourke, junior,<sup>(6)</sup> the young son of the Governor, Sir Richard Bourke, written for his sister's information during the Governor's journey to Bathurst in 1832, contains some quaint references to bugs and fleas. At Sir John Jamison's house at Regentville he wrote on Sunday, October 21: "The bugs bit so dreadfully last night that I made interest with Dolly, the housemaid, and was allowed to sleep on the drawing room sofa!" At Collett's Inn in the Blue Mountains, on Wednesday, October 24, he wrote: "Oh my dear Jan the bugs and fleas last night, and I who thought myself bug proof!"

### Coleoptera (Beetles).

I am indebted to the late Mr. A. M. Lea, Entomologist to the South Australian Museum, for the following and other notes to which his name is appended. He also points out that the name of the biting timber-beetle referred to in my last paper (page 713) is *Trogodendron fasciculatum* Schraib, family Cleridæ, and not as printed.

### *Crocophilus erythrocephalus* Fabr. (Staphylinidæ), Coffin-Cutter.

A. M. Lea refers to the coffin-cutter as follows:

This is one of the few really dangerous beetles in Australia. I have been told that it has caused "blood poisoning" here. During the Russo-Japanese war (early this century), I remember reading about fatalities to Japanese soldiers from blood poisoning due to bites of a beetle that was almost certainly this species. It is a fairly large rove-beetle (2/3rds of an inch in length), black, with a red head in which is a central black spot. It is nearly always present in carrion. I have always picked it up with tweezers and it always endeavours to bite. It occurs in Asia and Africa as well as Australia. An allied species, *C. oculatus*, is fairly common in New Zealand. Probably there are recorded cases of poisoning from the large European and American species of *Ocypus*, *Emus* and allied carrion rove-beetles.

### *Pheropsochus verticalis* Dejean (Carabidæ), and others of Genus: Smoke Beetles or Bombardiers.

A. M. Lea makes the following remarks about smoke beetles:

On being alarmed, these beetles crepitate rather noisily, giving off a small cloud of vapour, which, if it touches the skin, has a slight warming effect and stains it brown.

Dr. Herman Lawrence<sup>(7)</sup> attributed a dozen or more papules in the region of a man's right axilla, obviously due to bites, to carab beetles, which were found later on inspection of his pyjamas and bed clothes.

### Diptera (Flies).

#### Maggots in a Compound Fracture of the Leg.

Bernard O'Reilly,<sup>(8)</sup> in "Green Mountains", an excellent account of pioneer difficulties in the McPherson Ranges in the south of Queensland, gives a graphic description of his discovery in February, 1937, on the Lamington Plateau, of the wrecked Stinson air liner with two of its passengers still alive ten days after the crash. One of them, Proud, had a broken leg, green and swelling and maggoty. Next day, when after almost superhuman efforts on the part of O'Reilly assistance and stretcher bearers arrived, the doctor found that both life and limb could be saved. The very maggots which seemed to make the case so hopeless had eaten away the gangrenous flesh and checked the spread of fatal infection."

#### Fly-Blown Wounds.

W. H. Leigh<sup>(9)</sup> met with a native at Adelaide, in 1937, who had fallen out of a tree. He had a broken forearm, with the end of the bone bare and the wound swarming with maggots.

Towards the end of 1841<sup>(10)</sup> at the notorious Port Arthur in Tasmania, a lad named Broadman, aged seventeen years, was murdered by another named Belfield, aged eighteen years, who hit him on the head with sticks till he was rendered insensible and then "jabbed" him in the neck with a haftless knife. The victim was left insensible

in the scrub, where he was found two days later clotted with gore and fly-blown, but conscious. He died later in hospital.

#### Early References to Blow Flies and Bush Flies.

Lieutenant Breton,<sup>(11)</sup> in 1829, wrote of the Colony of Western Australia that "the blowfly is a greater nuisance than all the other insects and reptiles united, an officer at Swan River found his carpet bag swarming with the progeny of this loathsome insect". Moore,<sup>(12)</sup> under the date August 19, 1831, wrote of someone, probably at Fremantle, that "the blow flies had taken a fancy to his new blankets, which had been so covered by them as to require fumigation with brimstone to effect their dislodgment".

Captain Stokes,<sup>(13)</sup> in the Beagle near Cape Leveque, Northern Australia, in 1838 wrote as follows:

The flies are at you all day, crawling into your eyes, up your nostrils, and down your throat, with the most irresistible perseverance; and no sooner do they, from sheer exhaustion, or the loss of daylight, give up the attack, than they are relieved by the musquitos, who completely exhaust the patience which their predecessors so sorely tried.

#### Infected Bites from Sandflies and Mosquitoes.

Alan Frost,<sup>(14)</sup> at Darwin in 1942, found that bites from sandflies and mosquitoes nearly always became infected. The sandfly bites were commoner on the legs, the mosquito bites on the upper limbs. Ulcers formed in some cases, one-half inch or more in size. Treatment consisted of early stimulation by heat, later an antiseptic application, and finally the use of silver nitrate to form a coagulum seal.

#### Explorers' References to Mosquitoes and Sandflies.

Mosquitoes were found to be such a pest that Captain Wickham and Captain Lort Stokes,<sup>(15)</sup> in 1838, actually named Point Torment near King's Sound as a result of attacks by these insects. Captain Stokes wrote as follows:

A name was soon found for our new territory, upon which we with rueful unanimity conferred that of Point Torment, from the incessant and vindictive attacks of swarms of musquitos, by whom it had evidently been resolved to give the newcomers a warm welcome.

A little later in the voyage comes a further interesting description of the attacks of the mosquitoes:

I must be pardoned for again alluding to our old enemies the musquitos, but the reception they gave us this night is too deeply engraven on my memory to be ever quite forgotten. They swarmed around us, and by the light of the fire, the blanket bags in which the men sought to protect themselves, seemed literally black with their crawling and stinging persecutors. Woe to the unhappy wretch who had left unclosed the least hole in his bag; the persevering musquitos surely found it out, and as surely drove the luckless occupant out of his retreat. I noticed one man dressed as if in the frozen north, hold his bag over the fire till it was quite full of smoke, and get into it, a companion securing the mouth over his head at the apparent risk of suffocation; he obtained three hours of what he gratefully termed comfortable sleep, but when he emerged from his shelter, where he had been stewed up with the thermometer at 87°, his appearance may be easily imagined.

Our hands were in constant requisition to keep the tormentors from the face and ears, which often received a hearty wack, aimed in the fruitless irritation of the moment at our assailants, and which sometimes ended in adding head-ache to the list of annoyances. Strike as you please, the ceaseless humming of the invincible musquito close to your ear seems to mock his unhappy victim!

One poor fellow, whose patience was quite exhausted, fairly jumped into the river to escape further persecution.

Sir George Grey,<sup>(17)</sup> in 1839, near the Gascoyne in Western Australia, wrote of his party that "we were completely blackened from the numbers [of mosquitoes] that covered us".

David Lindsay<sup>(18)</sup> makes mention of the exploration in 1892 by L. A. Wells of the country in the neighbourhood of what has now become Laverton. On March 19, his diary has the following entry: "Very close morning, small black flies being very troublesome. . . . The sandfly is very

troublesome here." And on March 23 he wrote: "Sandflies, March flies and mosquitoes are very troublesome here."

A. A. Davidson,<sup>(1)</sup> on a journey to Tanami from Kelly's Well in Central Australia in 1900, noted on August 8 that "swarms of sandflies and thousands of hungry mosquitoes infested this camp", and on August 9 that "the sandflies and mosquitoes gave us an uncomfortable time".

#### *Stomoxys calcitrans* and Anthrax.

The late Mr. A. M. Lea informed me that many years ago, probably before 1906, a farmer at Devonport (Tasmania) lost a cow through anthrax. He went over to look at it, and a stable fly (*Stomoxys calcitrans*) "bit him on the hand and he died next day". I presume that a blood-ingesting stable fly would not bite a dead animal, and so, if the farmer was infected by the bite of such a fly, it must have bitten the cow whilst the animal was still alive, presumably some hours previously, and its biting parts had remained infective. The length of illness is obviously understated.

#### Robber Flies (*Asilidae*).

The late A. M. Lea noted that the large robber flies could give a sharp bite—a clean cut, but without venom.

#### Siphonaptera (Fleas).

##### *Fleas at Perth.*

It is interesting to note that fleas (probably the introduced dog flea *Ctenocephalus canis* Curtis, still numerous in sandy localities) were recorded by Backhouse<sup>(2)</sup> in December, 1837, only nine years after the establishment of the colony, as being "very numerous" at Perth.

Under the heading "Hemiptera", reference has already been made to the bugs and fleas at Collett's Inn in the Blue Mountains in 1832.

#### Lepidoptera.

##### *Moth Caterpillars Causing Rashes.*

Anthony Musgrave<sup>(3)</sup> has given accounts of the irritating hairs of various caterpillars. *Euproctis edwardsi*, a member of the family Lymantriidae (tussock moths) and closely related to the brown-tail moth (*Euproctis chrysorrhæa*) of England and America, feeds in the caterpillar stage on mistletoes (*Loranthus*). It pupates under the bark of trees. The hairs from the cast skins cause a severe rash if they enter the skin. Early in 1941 cases of irritation from caterpillars were reported from Meadowbank, Glenfield and Holdsworthy in New South Wales. An inspection by Mr. Musgrave of works at the first-named site on March 3 revealed pupae, with the old larval skins adhering, everywhere under the bark on the trees near by, as well as in the grooves of the corrugated iron sheds near and on the floor. All who had occasion to visit the room or area suffered from papulo-urticarial rashes. These appeared on the forearms, the neck and the backs of the legs, causing a hot, burning sensation and being very itchy. One man, Mr. Musgrave was informed, actually walked into the adjacent river to allay the irritation. The effects were intermittent, but the symptoms tended to recur during the night from the warmth of the bed clothes. Many of the workmen were affected and two had to be treated at Ryde District Hospital. Calamine and tar water relieved the irritation best. Dr. G. A. Waterhouse had found that the living caterpillars caused little disturbance in contrast to the dried, cast skins. He recommended camphor and carbolic to allay the ill effects.

Mr. Musgrave also refers to the larva of *Chelepteryx collesi* (Grey, 1835, family Anthelidae), one of our largest moths, which is clothed with short, stout hairs which later may be forced out through the cocoon. A finger that had come in contact with such a cocoon was covered with these brittle spines which broke off, leaving part embedded; the finger swelled to double its normal size. Mr. Musgrave also refers to the larvæ of *Anthela nicotiana* Bdv. (family Anthelidae), which Fleay has recorded as having spines which "give rise to a maddening irritation"; to the larvæ of the cup moth (*Doratifera vulnerans* Lew.), which have

erectile stinging hairs; to the hairy caterpillars of the moth *Ochrogaster contraria* Walker, 1855 (family Notodontidae), to which W. W. Froggatt<sup>(4)</sup> refers, and which feed on weeping myall (*Acacia pendula*)—they form bag-shelters in which they rest by day, and which are full of the irritating cast hairs; and to the larvæ of the hook tip moth, *Lewinibombyx lewini* (Lewin, 1895—*Panacela lewina*, family Bombycidae or family Lymantriidae), which feeds on the foliage of stringy bark *et cetera* and spins a silken bag shelter. This bag shelter, according to W. W. Froggatt,<sup>(5)</sup> caused the death of a number of horses which cropped the grass over which the caterpillars were passing; the spines from some of the larvæ which got into the mouths of the horses caused so much ulceration that they could not feed. Human beings also suffered from the effects on their skin.

The editor of *Wild Life*<sup>(6)</sup> quotes an experience of Mr. Charles French, who on one occasion at the Entomological Branch of the Victorian Department of Agriculture opened a box from the mallee that contained the bag nest of the processional caterpillar (*Ochrogaster contraria*) already mentioned. Removing the lid quickly, he became completely blinded for a while by the loose spines that puffed up into his face, causing intense agony. He was under medical care for three days.

The late Mr. A. M. Lea told me that when he was a boy preparing entomological specimens, he tried to "blow up" a hairy larva of *Spilosoma glatignyi* Le Guil, the woolly bear, and had a pair of painful lips for some time as the result.

#### Hymenoptera (Bees, Wasps and Ants).

##### *Bee Stings.*

Dr. E. Derrick, then of Mount Mulligan, North Queensland, following the last paper of this series, contributed a note on "A Striking General Reaction to a Bee Sting".<sup>(7)</sup>

A newspaper reference of September 8, 1933, to the discovery of a war pensioner at Perth, in a semi-conscious condition and with his limbs and body covered with bee stings, proved on inquiry to be without foundation as far as bee stings were concerned.

In the Port Pirie district, South Australia, in 1935, a lorry transporting hives of bees was overturned. Only two of the seven persons concerned in the accident were stung by escaping bees. The owner of them, who had been frequently stung before, received hundreds of stings whilst cleaning the hives, but felt only a slight headache and a soreness like a bruised, itchy sensation about the head and arms where he had been stung, followed on the next day by "spots of blood", which "rose to the surface of the skin about the arms where the bees had stung appearing like small bruises, no swelling occurred".

I am indebted to Dr. S. Dawkins, of Adelaide, for the following note:

J.A.P.C., a signalman, on April 21, 1931, whilst on duty in a cabin by himself at one of the smaller stations on the Hills Line, was stung by two bees. He positively states that they were bees, although it was impossible to get corroborative evidence on this point. He suddenly became giddy, and broke out into profuse perspiration. He remembers trying to call another signalman to his assistance, and in attempting to attract his attention he collapsed and fell down the steps of the cabin, and was found by his mate shortly afterwards, unconscious and bleeding from a wound at the back of the head. Medical attention was summoned, and it was found that the concussion and head wound were not serious.

He, however, developed a very severe type of "urticaria" which prevented him returning to work for two and a half weeks, and in view of a previous legal opinion, he was given the benefits of compensation for that period.

The late Mr. A. M. Lea was stung on the left side of the top of the head in Brisbane in 1929. A few hours afterwards he had a "heavy paunch" under the right eye, and three large hard lumps (the biggest about the size of a shilling) on the right cheek. He was disfigured for three days.

### Wasp Stings.

I am indebted to Mr. A. M. Lea for the following notes on wasps:

Probably the worst stinging Hymenoptera in Australia are the wingless Mutillidae and Thynnidae. The sting of the so-called blue-ant, *Diamma bicolor* Wood, is much worse than that of a bee. A large red wasp in New Guinea is much feared by the natives.

The Indian wasp, *Polistes hebraeus* (Fabr.), has been introduced to Fiji, and is abundant on many of the islands. The manager of a coconut plantation on Wakaya told me that he was stung four times the day we landed there, and he said that on certain parts of the island they were so bad that the natives would not work on them. An inspector of the Department of Agriculture was stung on the ankle by one during our visit and was violently sick.

### Ants (*Myrmecia*).

A. M. Lea states that "all the species of *Myrmecia* (soldier-ants, bulldog-ants, sergeant-ants, jumper-ants) can sting severely".

### *Chalcoponera metallicum* Sm.

According to A. M. Lea, the ant *Chalcoponera metallicum* "can inflict a rather severe sting; on crawling up one's pants it often stings three or four times before it can be crushed".

### *Ecophylla virescens* Fabr. (Green Tree-Ant).

With regard to the green tree-ant, A. M. Lea makes the following remarks:

Although this is not a stinger, it is such a savage biter, that I think it is even worse than the gravel ant (*Iridomyrmex detectus* Im). The nests of the latter can be seen and readily avoided, but in passing through the Queensland bush one often unexpectedly disturbs a nest of the tree ants, with somewhat painful results.

It was probably this species that Sir George Grey<sup>(20)</sup> encountered in 1838, near Hanover Bay, Western Australia, when he wrote:

Whenever a tree was shaken, numbers of a large green sort of ant fell from the boughs on the unhappy trespasser, and making the best of their way to the back of his neck, gave warning by a series of most painful bites, that he was encroaching on their domain.

### References.

- <sup>(1)</sup> J. B. Cleland: "Insects and their Relationship to Disease in Man in Australia", Transactions of the Ninth Session of the Australasian Medical Congress, Sydney, September, 1911, Volume I, 1913, pages 548-570. And as "The Relationship of Insects to Disease in Man in Australia", Second Report of the Government Bureau of Microbiology . . . during the years 1910 and 1911, New South Wales, 1912, pages 141-158.
- <sup>(2)</sup> J. B. Cleland: "Insects and their Relationship to Injury and Disease in Man in Australia", Transactions of the Australasian Medical Congress, Eleventh Session, Brisbane, 1920, page 258.
- <sup>(3)</sup> J. B. Cleland: "Insects and their Relationship to Injury and Disease in Man in Australia", Series III, THE MEDICAL JOURNAL OF AUSTRALIA, December 5, 1931, page 711.
- <sup>(4)</sup> S. Minogue: "Pediculi Pubis", THE MEDICAL JOURNAL OF AUSTRALIA, January 1, 1935, page 33.
- <sup>(5)</sup> K. C. McKeown: "Australian Insects. XV. Book-lice, Lice and Thrips", THE AUSTRALIAN MUSEUM MAGAZINE, Volume VII, Number 11, December, 1941-February, 1942, page 385.
- <sup>(6)</sup> K. C. McKeown: "Australian Insects. XVII. The Bugs—Order Hemiptera-Heteroptera", THE AUSTRALIAN MUSEUM MAGAZINE, Volume VIII, Number 1, June-August, 1942, page 29.
- <sup>(7)</sup> R. Bourke, junior: Quoted by W. L. Havard in "Along the Road to Bathurst in 1832", Royal Australian Historical Society Journal and Proceedings, Volume XXVI, Part IV, 1940, pages 345 and 348.
- <sup>(8)</sup> H. Lawrence: "Further Observations upon the Pathogenicity of Demodex (Owen) in the Human Being and of other Parasites producing Skin Diseases", THE MEDICAL JOURNAL OF AUSTRALIA, November 12, 1921, page 413.
- <sup>(9)</sup> E. O'Reilly: "Green Mountains", 1940, pages 26 and 37.
- <sup>(10)</sup> W. H. Leigh: "Reconnoitering Voyages and Travels with Adventures in the New Colonies of South Australia", 1839, page 173.
- <sup>(11)</sup> D. Burn: "A Visit to Port Arthur in 1842"; cited by J. W. Beattie, "Port Arthur".
- <sup>(12)</sup> H. W. Breton: "Excursions in New South Wales, Western Australia and Van Diemen's Land", 1833; quoted by W. B. Alexander, "History of Zoology in Western Australia", Journal and Proceedings of the Royal Society of Western Australia, Volume III, 1916-17, page 38.

<sup>(13)</sup> G. F. Moore: "Diary of Ten Years' Eventful Life of an Early Settler in Western Australia", 1884; cited by W. B. Alexander, *loc. citato*, page 43.

<sup>(14)</sup> J. Lort Stokes: "Discoveries in Australia", 1846, Volume I, page 100.

<sup>(15)</sup> A. Frost: "Notes on Skin Infections: Darwin", THE MEDICAL JOURNAL OF AUSTRALIA, August 22, 1942, page 136.

<sup>(16)</sup> J. Lort Stokes: *Loco citato*, Volume I, pages 128 and 143.

<sup>(17)</sup> G. Grey: "Journals of Two Expeditions of Discovery in North-West and Western Australia", 1841, Volume I, page 353.

<sup>(18)</sup> D. Lindsay: "Journal of the Elder Exploring Expedition, 1891", South Australian Parliamentary Paper, Number 45, 1893.

<sup>(19)</sup> A. A. Davidson: "Journals of Explorations in Central Australia", South Australian Parliamentary Paper, Number 27, 1905, pages 47 and 48.

<sup>(20)</sup> J. Backhouse: "A Narrative of a Visit to the Australian Colonies", 1843, page 530.

<sup>(21)</sup> A. Musgrave: "Some Caterpillars Injurious to Man", THE AUSTRALIAN MUSEUM MAGAZINE, Volume II, Number 1, January, 1924, page 34; "Harmful Moth Caterpillars", Volume VII, Number 11, December, 1941-February, 1942, page 391.

<sup>(22)</sup> W. W. Froggatt: *Agricultural Gazette of New South Wales*, 1911, page 443.

<sup>(23)</sup> W. W. Froggatt: *Loco citato*, page 446.

<sup>(24)</sup> *Wild Life*, Volume IV, Number 6, June, 1942, page 233.

<sup>(25)</sup> E. Derrick: "A Striking General Reaction to a Bee Sting", THE MEDICAL JOURNAL OF AUSTRALIA, June 11, 1932, page 833.

<sup>(26)</sup> G. Grey: "Journals of Two Expeditions of Discovery in North-west and Western Australia", 1841, Volume II, page 83.

## Reviews.

### BRAIN INJURIES IN WAR.

In his book on the after-effects of brain injuries in war, Dr. Kurt Goldstein has included the results of his observations in both the present war and the 1914-1918 conflict.<sup>1</sup> It is essentially a practical book and a welcome contribution to the literature of a much-avoided sphere of medicine. As Dr. Denny-Brown writes in the foreword, "it is the starting point for many—surgeon, physician, psychiatrist and neurologist"; but it is not a text-book and will be found of most value when used as a handbook in conjunction with the other more general publications.

Part I deals with symptoms. Here the general manifestations following cerebral trauma, neurological symptoms and mental aberrations, are all discussed fully, with numerous references to actual cases seen. The question of localization of the neurological lesion is well done, yet without undue stress on the purely academic considerations. In a practical light, and without going out of the depth of the majority of readers, the author traces the origin of the symptoms. An innovation which will be hailed by all who are interested in this sphere is the section on psychological laboratory tests. Here not only the methods of performance but also the evaluation of results of these tests are described.

The second part is concerned with treatment, and here this publication shines. The treatment of the immediate organic lesion is not dealt with as the book is essentially about the "after-effects". The psychotherapy of the numerous mental disorders is done in detail and without the innumerable generalizations so often found in writings on this subject. As a handbook to the psychotherapy of these patients the book will be found of immeasurable value. Finally a section on social readjustment fills a much lamented gap. More stress is laid on producing a satisfactory, self-supporting integral member of society than an "organic cure". In this section there are useful contributions to our ideas of compensation and social care, as well as rehabilitation.

To sum up, this is an extremely useful book, and will be found a most reliable guide for those who are interested in the care of patients suffering from post-traumatic conditions. It is short and concise and written in a style which makes it most readable.

<sup>1</sup> "Aftereffects of Brain Injuries in War: Their Evaluation and Treatment: The Application of Psychologic Methods in the Clinic", by Kurt Goldstein, M.D., with a Foreword by D. Denny-Brown, M.D.; 1942. London: William Heinemann (Medical Books) Limited. 8½" x 6", pp. 244, with illustrations. Price: 21s. net.



# The Medical Journal of Australia

SATURDAY, JANUARY 1, 1944.

All articles submitted for publication in this journal should be typed with double or treble spacing. Carbon copies should not be sent. Authors are requested to avoid the use of abbreviations and not to underline either words or phrases.

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## ABSENTEEISM.

No member of the community can fail to be interested in the absenteeism of industry. All who are concerned in the prosecution of the war know that equipment is of vital importance and that output must be kept at the highest possible level. Even those who have no direct concern in wartime industry know what absenteeism means when, apparently as a result of it, they are faced with restrictions in the gas and electricity needed to run their homes. Absenteeism is a problem that has to be faced in all English-speaking countries. To fulminate against absentees and to brand them all as slackers or worse is plain foolishness. The problem must be studied if anything is to be done about it—and absenteeism is beyond all doubt partly a medical problem. Unfortunately it is not sufficient for doctors to probe such a question and to understand it to their own satisfaction. The matter is of such weighty public importance that the mythical man-in-the-street must be made to appreciate the medical point of view. How difficult this is, medically trained persons know only too well.

The subject of absenteeism has been much before the public of Australia during the last few months and it is appropriate to bring to the knowledge of medical practitioners, particularly those practising in industrial areas, an address delivered last April under the auspices of the Committee on Industrial Health of the Massachusetts Medical Society by L. R. Daniels.<sup>1</sup> Daniels is medical director of an industrial undertaking and he has handled his subject, "Medical Aspects of Absenteeism", in a convincing way. From his experience he judges that about half the absences in industry are due to medical causes; he also believes that, no matter what the cause, absenteeism is a subject for study by persons who have a real understanding of human reactions under stress. By reason of their training and their interest in human reactions and behaviour, medical practitioners should be more likely than many other groups of persons to achieve success in such a study. Daniels divides industrial absences into three categories: those due to *bona fide* illness and non-industrial accident, those due to industrial accident, and those due to other causes. With the third

of these groups medicine can have no special concern, apart from any fatigue of mind or body that may be involved or any abnormal psychological factor that may be present. In this classification it is clear that fatigue operating alone would have to be classed as an illness in the first group unless it was specially mentioned. If it falls to the disciples of medicine to study industrial illness and accident that they may be in a position to effect a cure, politicians must surely do the same in regard to the third group of absences which in the present national emergency come within their particular sphere of influence. We may leave politicians to their duties and responsibilities with the remark that without knowledge and understanding it is senseless to beat the air with words, to deplore obstinacy or to use vain threats of retribution. Daniels is certainly right when he states that when the proper remedy is applied to the third group of absences the greatest reduction in lost time will be effected. No data are available to indicate how much time is lost to Australian industry because of absenteeism. Some of the figures quoted by Daniels for America, however, are striking enough to demonstrate the great importance of the subject. He states that in America eight days are lost each year by men and twelve by women because of illness and accident of non-industrial origin; on the basis of 300 working days this means respectively 3% and 4% in the year. In December, 1942, there were in the United States 52,500,000 "workers", 71% being men and 29% women. At the male sickness absentee rate of eight days a year a minimum of 420,000,000 man days or 3,360,000,000 man hours was lost during 1942 from sickness alone. If the figure is doubled to include time lost from all causes, the total time lost through absences reaches the enormous total of 7,000,000,000 man hours; and this total is really less than the actual loss. On previous occasions a great deal has been written in these pages on industrial fatigue and on the need for the adjustment of working periods, particularly during wartime, if production is to be maintained at the highest possible level. In other words it has been shown on indisputable evidence that to increase the working hours does not necessarily increase production, but actually when a certain optimum point is passed tends to lower it. It is recognized that when an extra spurt is needed to obtain a larger output for a specific reason, an increase in working hours, even a relatively large increase, may be relied on to produce the result. But this can be only an extra spurt operating for a short time; unless the hours are again reduced at the earliest possible moment, output will fall in spite of the longer hours and inefficiency will be shown in what is actually accomplished. Daniels states that most factory operations have been brought well within the physical capacities of the average worker; and this, of course, is true. It is not the day's work alone that produces fatigue; fatigue is a cumulative process. It is brought about by continued application to work and even to play without sufficient periods of rest. That the views of experienced medical people on the matter of fatigue do not always coincide with those of managers or departmental officials is common knowledge, and the result is that difficulties are created for the worker and embarrassment for the medical practitioner. Bureaucracy can be both insensate and unintelligent. In these circumstances the medical practitioner has to take

<sup>1</sup> The New England Journal of Medicine, June 17, 1943.

a definite stand, and for the sake of the worker as well as of the industry and its output, insist on his point of view. This necessity is, we believe, realized by most medical practitioners. They have to be careful that the mulish attitude of officials does not drive them too far, as well it may, if they are not alert and watchful. In this regard one aspect of the subject that is discussed by Daniels at some length, should be mentioned; by attention to it practitioners may possibly stimulate the worker's *esprit de corps* and also reduce absenteeism. Daniels points out that the man or woman who has been ill may have attained full physical recovery, but that there is often a lag in the return of mental alertness and the desire to get going again. "It is not unusual for these patients to be depressed and in need of a bit of encouragement." Daniels thinks that this is the time to suggest their return to work, for to get back on the job is often the exact tonic needed to effect a complete recovery. Let there be no misunderstanding—Daniels does not urge the return to work of people who are ill or convalescent. His reference is to the person who has recovered from his physical illness, but who finds it difficult to get into the right state of mind to take up his job again. The tardy return of people to work after minor illnesses is not in his opinion the major cause of absenteeism, but it has assumed a greater importance since absentee rates have risen from a "reasonably normal" 3% to the high level of 8% or 10%. Daniels quotes certain figures. A study of 700 workers whose disability had lasted for more than a week, showed that 84% returned to work on Monday, 10% returned on Tuesday, 4% on Wednesday, 1.25% on Thursday, 0.75% on Friday and none on Saturday. Clearly the return on Monday must be the result of choice and not of recuperation and ability to work. It is reasonable to conclude that many workers who resume on Monday could return to work earlier if they really wanted to, and they might want to if they were urged by their medical attendants to start as soon as they were able and to disregard the convention of starting on Monday. It may be argued that the results of such urging would be comparatively small, but when the nation is concerned with manpower hours in millions this is not so. In any case if medical practitioners were not always wedded to the "start-on-Monday" convention, more credence would be given to their estimates of a person's capacity for work.

Another aspect of the subject discussed by Daniels has to do with the increased number of women workers in industry. In one plant employing 5,000 workers there were normally 60% men and 40% women. The daily absence rate was then 3%, and during an influenza epidemic in January, 1941, it rose to 7%. Later when the Army and Navy drew heavily on the manpower of the plant, the proportion of employees was 34% men and 66% women; with this change there was an increase in absence rate from 3% to 8.5%, "an all-time high". Most of the increase was regarded as chargeable to the increased number of women employed. The youth of the women is also important. "Many of them are at work for the first time, and are not yet accustomed to factory hours and regulations." The reasons why these young women do not at once fit into the industrial machine are psychological rather than medical. When the medical practitioner, particularly the practitioner attached to the industrial organization, comes into contact with these young persons he may be able

to help them to realize their importance, to appreciate the dignity of work and to take a pride in their own efficiency. In the words of Daniels—"Physicians who are familiar with the weaknesses and emotions of people, should be able to do much to help in correcting these evils. We have more and closer contacts with the worker than any other group or class of people, and we can influence their attitude greatly if we will." The final word is that the doctor must study his subject and become quite familiar with it. When he has done this he should do his duty to the industry and to the nation which stands in need of industrial vigour; but he should temper all his decisions with the knowledge that he is dealing with human beings who have the same kind of make-up as he has, the same weariness of the flesh when the flesh is sorely tried, and the need for rest and refreshment. To go, weary, from labour to refreshment is good, but to return to labour refreshed is better. When reasonable doubt arises the employee should be given the benefit of the doubt, but a statement of the doubt to the employing authority will, unless the authority is devoid of understanding, increase the confidence that all concerned should have in the medical opinion.

## Current Comment.

### BONE GRAFTING.

BONE GRAFTING was originally introduced under the mistaken impression that the graft remained alive in its new situation. That this impression should have been accepted is not surprising in view of the superiority of the results produced by an autogenous graft living at the time of the operation as compared with the results produced by boiled bone grafts or by metal plating of the bones. However, histological studies after the implantation of an autogenous graft show a complete absence of bone cells in the lacunae of the graft and a continued surface erosion of the graft by vascular loops of granulation tissue which is followed by the deposition of new bone and ultimately by the complete replacement of the graft. As Watson Jones<sup>1</sup> states, "the evidence that the main mass of the graft is nothing more than a bone conducting medium is overwhelming". It is to this replaceability, to the ready supply of calcium and to the viable osteogenic cells of the periosteum that the autogenous graft owes its superiority. All types of bone graft have in common the advantage of producing an internal splint which limits to a greater or lesser degree the mobility of the bone fragments. Also, during the preparation of the bed for the graft, much of the sclerosed bone is removed, which process in itself stimulates the formation of callus.

The rate of absorption and the callus stimulating properties of cow horn, ivory and beef bone have recently been studied by C. W. Hughes<sup>2</sup> in animals. He found that the absorption of beef bone is perceptible after one month, but that the absorption of ivory pegs is not perceptible for six months, and that the absorption of cow horn is not perceptible for nine months. This author also found that there was no firm union between ivory or cow horn pegs and the host bone, whereas there was a definite bony union between the beef bone pegs and the host bone. While the superiority of autogenous bone is usually admitted, the patient should not be denied the advantages of a graft when such is needed and when for some reason or other an autogenous graft is not available. Hughes's experiments would indicate that in such circumstances beef bone is a more suitable substitute than ivory or cow horn.

<sup>1</sup> R. Watson Jones: "Fractures and other Bone and Joint Injuries", 1940.

<sup>2</sup> Surgery, Gynecology and Obstetrics, June, 1943.

The slightly lesser formation of callus around beef bones does not counterbalance its other advantages.

The fact that the action of a bone graft is mainly that of an internal splint invalidates the arguments against the use of a twin motor saw, since the death of some of the bone cells from the heat of the saw is immaterial. By the use of such a saw an accurate fit of the graft is assured. Its opponents have endeavoured to attain this by means of a chisel or hand saw. The application of the wedge principle to the graft as proposed by R. E. Kelly<sup>1</sup> helps to overcome the inaccuracies of the fit of the hand-cut graft. Recently in a paper discussing the treatment of fractures of the tibia and fibula J. R. Armstrong<sup>2</sup> suggested that the graft should be bevelled. This also helps to improve the accuracy of the fit of the hand-cut graft, but it was suggested by Armstrong rather because this shape would prevent an inlayed graft from sinking into the medulla when it is screwed in place. On the other hand, there is the school of opinion championed by Watson Jones which believes that when a graft is cut with a twin motor saw it may be made to fit so accurately that it may be sprung in place, and that screws either of beef bone or metal are most often superfluous. With a graft so cut there is little tendency for it to sink into the medulla compared with a hand-cut graft; and although a complicated mechanical saw could be devised to cut a bevelled graft, this is unnecessary.

In the majority of cases the need for bone grafting is an indication of inadequate treatment, and unless the perpetrator of the original mistakes realizes them and the inadequacies of the treatment so far employed, the patient will be worse off after the surgeon's attempts at grafting, for it is probable that the mistakes, usually of inefficient and insufficient immobilization, will be repeated. We have today a clearer understanding of the subject of bone grafting than in the past, and while unanimity of opinion as to its indications and technique is still lacking, there is considerably more agreement than ever before on the general principles of this subject. The procedure of bone grafting is not one for the occasional surgeon unaccustomed to orthopaedic surgery, and never will be; but such a surgeon should be in a position to realize the possibilities of this operation when properly performed in suitable cases and should not condemn it in the future simply because of previous mishaps or tragedies in his own or other inexperienced hands.

### SULPHAMERAZINE.

THE search for fresh drugs of the sulphonamide series which will be more effective than those already in use or which will be less likely to be followed by complications, is being continued, and fresh reports must be expected to appear from time to time. W. H. Hall and W. W. Spink report on a new drug known as sulphamerazine<sup>3</sup>. They have found, in company with other workers, that sulphadiazine is less toxic than sulphathiazole, sulphapyridine and sulphanilamide, but that renal complications following its use are not uncommon. For this reason they have explored the therapeutic possibilities of the monomethyl derivative of sulphadiazine—sulphamerazine. The dimethyl derivative is known as sulphamethazine. Sulphamerazine was first described, so Hall and Spink state, by Robin and his associates, who found that it was two and a half times more soluble in water than sulphadiazine. These workers also prepared sulphamethazine and found that it was two and a half times more soluble in water than sulphamerazine. Robin and his fellow workers found that higher maximum blood levels could be established in white mice with sulphamerazine than with identical doses of sulphadiazine. They found similar levels with sulphamethazine.

Hall and Spink have given sulphamerazine or its sodium salt to 116 patients, 15 of whom were children under one

year of age. The conditions from which the patients suffered included the following: lobar and atypical pneumonia, 47 cases; pneumococcal bronchitis, eight cases; staphylococcal sepsis (one bacteraemia), 11 cases; influenza meningitis (Type B), two cases; meningococcal meningitis, three cases; streptococcal meningitis, two cases; streptococcal sepsis (one bacteraemia), 31 cases; a miscellaneous group, 12 cases. Adults and older children were given by mouth an initial dose of 3.0 to 4.0 grammes, followed by 1.0 gramme every six hours. This dosage was maintained until the temperature had remained normal for forty-eight hours, and it was then reduced to 0.5 to 1.0 gramme every eight hours. Administration was discontinued on the fifth to the seventh day. For infants and smaller children the initial dose was 0.05 gramme per pound of body weight (no amount in excess of 4.0 grammes was given) and the maintenance dose was 0.05 gramme per pound of body weight, given in divided doses until the temperature returned to normal. The results may be stated shortly as follows. Sulphamerazine appeared to be as effective as sulphadiazine in the treatment of patients with pneumonia; it was less effective than sulphathiazole in staphylococcal sepsis. Patients with streptococcal sepsis responded as well to sulphamerazine as a comparable group did to sulphadiazine. Two patients with influenza meningitis due to Type B organisms and three with meningococcal meningitis recovered with sulphamerazine. Under the conditions of the investigation adequate blood concentrations could be maintained with smaller doses of sulphamerazine than of sulphadiazine, and the doses had to be given less frequently. Toxic manifestations were encountered no more frequently than with sulphadiazine. Five patients suffered from nausea and vomiting, three suffered from drug fever, two from dermatitis, one from leucopenia and granulopenia, one from gross haematuria and anuria and one from oliguria. Though sulphamerazine is more soluble in urine than sulphadiazine, two of the patients developed renal complications owing to precipitation of the drug in the form of crystals within the urinary tract. Evidence is put forward to show that an adequate fluid intake and alkalization of the urine may prevent complications of this kind. The suggestion is made that the fluid intake should be so maintained that the urinary output during a period of twenty-four hours will range from 1,000 to 2,000 cubic centimetres. At the same time enough bicarbonate of soda should be given so that the pH of the urine is 7.5 or more.

In support of Hall and Spink's observations another recent report by M. H. Lepper, L. K. Sweet and H. F. Dowling may be quoted.<sup>4</sup> These authors used sulphadiazine and sulphamerazine in the treatment of patients suffering from meningococcal meningitis. Their general conclusion is that sulphamerazine is apparently as good a therapeutic agent as sulphadiazine.

In view of this interesting report from Hall and Spink on the value of sulphamerazine, it is appropriate to recall an article by D. W. Macartney, R. W. Luxton, G. S. Smith, W. A. Ramsay and J. Goldman published in 1942 on the results of clinical trial of sulphamethazine.<sup>5</sup> These workers found the drug effective in 73 cases of lobar pneumonia and in several cases of meningococcal meningitis and gonorrhoea. They commented on its high therapeutic efficiency and thought that on account of its high solubility it was unlikely to cause renal damage. They found that the incidence of nausea and vomiting was much less than with sulphapyridine and that cyanosis did not occur. Later in 1942 P. A. Jennings and W. H. Patterson reported results of clinical trials in children of sulphamethazine.<sup>6</sup> They found its efficiency in bronchopneumonia and meningococcal meningitis "encouraging". They observed "the same low toxicity" in children and infants as had been reported in adults.

Further reports on the latest sulphonamide drugs will be awaited with interest. The full light of searching and impartial criticism is needed so that no new therapeutic fashion, beloved of many, will be created.

<sup>1</sup> *The British Journal of Surgery*, Volume X, 1922-1923, page 232.

<sup>2</sup> *The Lancet*, August 14, 1943.

<sup>3</sup> *The Journal of the American Medical Association*, September 18, 1943.

<sup>4</sup> *The Journal of the American Medical Association*, September 18, 1943.

<sup>5</sup> *The Lancet*, May 30, 1943, page 639.

<sup>6</sup> *The Lancet*, September 12, 1942, page 308.



## Abstracts from Medical Literature.

### MEDICINE.

#### Morphology of Erythrocytes in Erythroblastosis Fetalis.

EDWARD H. REISNER, JUNIOR (*Archives of Internal Medicine*, February, 1943), discusses the records and blood smears in 24 cases of fetal hydrops and *icterus gravis*, examined to determine to what extent the blood picture in *erythroblastosis fetalis* simulates the picture seen in experimental anemias due to antibodies. The recent work of Levine and his associates has shown that about 90% of infants with *erythroblastosis fetalis* have an antigen designated as Rh in their blood cells which is inherited from the father probably as a Mendelian dominant character, and which the mother lacks. With the demonstration of anti-Rh antibodies in the serum of a large percentage of the mothers of erythroblastotic infants the plausible hypothesis was advanced that *erythroblastosis fetalis* is the result of an intrauterine antigen-antibody reaction. Further work has shown that an additional 7% of erythroblastotic infants have mothers whose blood contains Rh antigen, but who lack a genetically related antigen designated hR, which the babies have. It seems likely that eventually all cases of erythroblastosis may be shown to depend on these or similar factors. The author demonstrated that patients with erythroblastosis exhibited morphologic alterations in the red cells of the same general type as those seen in clinical and in experimental auto-hemolytic anemias. In 23 cases the Price-Jones curves were biphasic with macrocytic peaks, and in one case there was marked microcytosis. The degree of reticulocytosis in *erythroblastosis fetalis* reported by different authors varies, but apparently it is not as high as that usually encountered in other hemolytic anemias with a comparable degree of blood destruction, and the possibility of marrow inhibition must be considered. In the presence of macrocytosis the cause of inhibition might theoretically be a lack of the erythrocyte maturation factor stored in the liver. Four patients examined at autopsy showed varying degrees of hepatic damage. In all cases unmistakable megaloblasts were observed in the smears. The significance of megaloblasts is still a subject of controversy, but at present a majority of investigators in America and Europe incline to the opinion that they represent an abnormal type of erythropoiesis which occurs in the absence of the hepatic erythrocyte maturation factor. Other authors have previously incriminated the liver. Janet showed that his patients with hydrops had extremely low levels of plasma proteins, prothrombin and fibrinogen. Numerous necropsy reports indicate extensive hepatic damage in cases of hydrops. In these there is usually extensive and often almost complete necrosis of the hepatic parenchyma, whereas in milder cases of *icterus gravis* there is less severe necrosis, and in the mildest cases there are only slight evidences of hepatic cellular damage. Varying

degrees of extramedullary hemopoiesis are observed in the liver in all types. Several cases of portal cirrhosis in children who had recovered from *icterus gravis neonatorum* are reported in the literature. Darrow suggested that the observed hepatic damage could be explained on the basis of a hypothetical antigen-antibody reaction, citing the work of Well and Dean and Webb, who studied the changes in the liver in dogs during anaphylactic shock. Wintrobe and Shumacher showed that the red cells in the maturing fetus exhibit changes similar to those of red cells in a person with pernicious anemia undergoing liver therapy, for example, decreasing size and increasing number. From this they postulated that as the fetal liver matured, more erythrocyte maturation factor was available for hemopoiesis. The author formulates a tentative explanation for the observations reported in this paper by postulating that the fetal blood in *erythroblastosis fetalis* contains antigens from the father which the mother lacks. One of these is Rh, another is hR, and there are probably others as yet undiscovered. Through a defect in the placenta, fetal red cells enter the maternal circulation and antibodies against them are produced. These antibodies are transmitted diaplacentally to the fetus, in which an antigen-antibody reaction takes place. Hemolysis occurs, accompanied or followed by damage to the liver and perhaps to other organs. Too much, however, should not be expected from liver therapy in patients with erythroblastosis. The macrocytic anemias of hepatic disease do not respond well to injections of liver extract. However, it seems reasonable to suggest injections of liver extract as an adjuvant to transfusion therapy, particularly during the recovery phase in patients with this disease.

#### Angina Pectoris and Peptic Ulcer.

In reviewing some of their earlier communications, H. Levy and E. P. Boas (*Archives of Internal Medicine*, March, 1943) point out that certain clinical patterns exist in the correlation of the syndromes of peptic ulcer and angina pectoris: (i) The symptoms of peptic ulcer and anginal symptoms may occur suddenly and simultaneously, and occasionally acute peptic ulcer may be associated with coronary thrombosis. (ii) Repeated attacks of angina pectoris while the patient is at rest, finally giving place to coronary thrombosis, may occur two or three hours after meals and during the night at the hours characteristic of pain from ulcer. (iii) When symptoms of angina pectoris and peptic ulcer coexist, successful treatment for symptoms of ulcer may cause remission of the anginal syndrome. (iv) Epigastric localization of anginal pain may be conditioned by a preexisting peptic ulcer. In the authors' present paper an attempt is made to explain these phenomena, and it is suggested that the common denominator of the two syndromes is heightened excitability of the vagus nerve. Symptoms of peptic ulcer may arise from vagal activity in the stomach and symptoms of angina pectoris may result from vagal coronary vasoconstriction. A functional disorder of one organ may reflexly, via the vagus nerve, induce a disorder in the other. Patients with angina pectoris walk with greater

difficulty after eating because anginal pain is more readily induced and is caused by the increased work imposed on the heart by the digestive processes as well as by the reflex coronary constriction resulting from gastric distension and contraction. This susceptibility can be reduced or even abolished in some cases by giving full doses of atropine. Whether the patient can walk more freely when the stomach is full or when it is empty will depend on which influence is the stronger, the vasoconstrictor effect on the coronary arteries, conditioned reflexly by the gastric distension induced by the meal, or the inhibition of the hunger contractions by the introduction of food into the stomach and the consequent reduction of afferent impulses or of vagal tone. Full doses of atropine, sedation with phenobarbital and ulcer diet will usually give relief from the anginal symptoms in a patient with peptic ulcer. Patients who have had peptic ulcer and who subsequently have disease of the coronary arteries may experience anginal pain on effort or the pain of coronary thrombosis only in the abdomen. In some cases the pain may start in the abdomen and radiate to the chest or the arms; in others it may commence in the chest and radiate to the abdomen. This distribution of pain may be due to reflexes initiated by the disturbance in the heart or the pain may simply travel along nerve pathways previously sensitized by the ulcer.

#### Purpura of the Skin.

E. DAVIS (*The Lancet*, August 7, 1943) has reviewed 500 cases of purpura of the skin and recorded the incidence of different types. Patients suffering from purpura simplex (78 cases) and hereditary familial purpura simplex (79 cases) included 147 females. Schönlein's purpura (12) and Henoch's purpura (21), hemorrhagic diathesis (7), primary thrombocytopenic purpura (4) and hemophilia (1) made up the primary non-symptomatic purpuras. Symptomatic purpura (317 cases) included those cases associated with alimentary, cardio-vascular and renal disease, and so-called metabolic endocrine purpura. Infections (53) and senile and cachectic purpura comprised a large proportion of the remainder. Rheumatic (47) and hematological purpuras (18), scurvy (5), cold, orthostatic and traumatic purpura completed the tale. The author states that the majority of the patients were cured. Anaphylactoid purpura was not common, rheumatism was more frequently an associated condition. It was a question whether rheumatism should be regarded as an allergic manifestation. Association with urticaria was noted in sixteen cases. Serious purpura was relatively rare, and purpura simplex seldom developed into the hemorrhagic type. Even in the most extensive purpuras the prognosis was usually good.

#### Uncomplicated Duodenal Ulcer.

LUCIAN A. SMITH AND ANDREW B. RIVERS (*The Journal of the American Medical Association*, May 22, 1943) discuss the treatment of uncomplicated duodenal ulcer, and state that certain fundamental principles pertaining to peptic ulcer are not used sufficiently in the evaluation and treatment of this disease. Too often the local lesion is

remembered, and the patient who harbours the disease is forgotten. Even when many factors promote chronicity, the natural tendency of an ulcer is to heal, and the obviously ideal time to heal an ulcer is early in its course. The term "uncomplicated duodenal ulcer" implies the absence of perforation, deep penetration, hemorrhage or gastric retention. Essential to successful medical treatment is a careful evaluation of all the factors which seem to promote chronicity, and this includes a carefully taken descriptive history of the development of symptoms, and an inquiry into the possible aetiological factors and those acting to keep the ulcer active. The neurogenic factor is probably the most important single factor in any case of ulcer, and its recognition is necessary in the evaluation of symptoms, in the management of the actual healing of the ulcer, and in the prevention of recurrence of ulcer. Chemical factors cause the greatest difficulty in the healing stage, because of the lack of really adequate methods of reducing the gastric acid concentration to a low enough point to permit of quick healing and maintenance at that level throughout the twenty-four hours. When a method of eliminating secretion of free acid is found, all ulcers will respond to treatment provided mechanical obstruction is not already too great. Other factors influencing the chronicity of an ulcer are infections with organisms that have a special affinity for gastroduodenal localization, such as those of influenza, coryza, chronic tonsillitis, dental infection and chronic prostatitis; vascular changes typified by arteriosclerosis; nutritional deficiencies such as result from poverty, voluntarily restricted diets, food diets, too strenuous ulcer diets, strictly limited allergy diets, and *anorexia nervosa*; and traumatic influences. The treatment of duodenal ulcer is dependent on the cooperation of the patient for its success. The two points that should be made clear to every patient whose ulcer is to be treated by a medical regimen are, firstly, that the responsibility for the healing of the ulcer belongs to him and not to the physician, to the surgeon, or to chance, and secondly, that treatment must be directed to more than the local lesion and that even after healing of the lesion care must be exercised for the rest of life to prevent recurrence. The authors prefer that the initial treatment of an ulcer patient should be undertaken in hospital. The treatment of uncomplicated duodenal ulcer consists of three parts, namely: (a) the control of ulcer symptoms, which is usually rapid and rarely requires more than a few days; (b) the healing of the ulcer, which probably requires from twelve to twenty-four months; (c) prevention of recurrences, which requires intelligent application of individual prophylactic measures during the rest of the patient's life. The authors have no fixed dietary programme, but use a type of diet commensurate with the severity of the symptoms, and the variety of foods is rapidly increased so that the patient's programme will permit him to carry on fairly normal activity on leaving hospital. After the average duodenal ulcer has been brought under symptomatic control, the healing stage is entered upon, whereupon the authors advise that the diet be increased rapidly to a liberal

bland diet with milk between meals and at bed-time, with antacid an hour after meals, and that the patient be warned of the fact that he must continue to treat himself for ulcer even though he does not have any distress. Mild sedation helps readjustment to his work, and the use of sedatives during periods of nervous tension or overloads of responsibility is recommended. The problem is to teach the patient that diet is not the principal means of treatment, for in point of fact the nervous factor is the dominant causative factor and therefore total reliance on diet and antacid is misguided advice. The evidence of radiological examination is of only moderate value in deciding about the healing of the ulcer, and if all the evidence after two years indicates satisfactory progress, the patient may consider himself in the third stage of treatment which involves the prevention of further ulceration. After the duodenal ulcer is considered healed, the authors instruct their patients in several aspects of the problem to prevent future recurrences. The realization that treatment has been successful, that the patient can liberalize his programme of diet and activity, that he can rely on his knowledge and judgement of his own ulcer to prevent further trouble, serves to give him a sense of confidence and hope for the future.

#### Thyreotoxicosis.

R. H. WILLIAMS AND G. W. BISSELL (*The New England Journal of Medicine*, July 15, 1943) discuss thiouracil in the treatment of thyreotoxicosis. Sulphonamides, thiourea and its derivatives will cause thyroid enlargement in rats and a drop in the basal metabolic rate. These changes can be prevented by thyroloid or thyroxin administration. It appears that the drugs act on the thyroloid, inhibiting the production of thyroxin, this leading to a decrease in body metabolism and increased pituitary activity. The authors treated nine unselected patients suffering from thyreotoxicosis with thiouracil 0.2 gramme three to five times a day. In all cases treated there were marked symptoms and signs of thyreotoxicosis; the basal metabolism was +30% to +80%. In all cases there was a marked clinical improvement and the basal metabolism decreased to +12% or less. In some instances the thyroloid gland increased slightly in size temporarily, to decrease later. In others there was a decrease in size from the first. As a rule the gland did not return to normal size. The benefit from thiouracil was noted from the second or third day, and was most marked during the third to the fifth week, by which time as a rule the basal metabolism had reached approximately normal figures. In two cases oedema of face and legs was observed, and this disappeared on reduction of the dose in one case and spontaneously in another. The usual dose of thiouracil was 0.2 gramme thrice daily. This dose was maintained. Six patients were treated as in-patients and three as out-patients; among the latter two housewives continued at work throughout treatment without ill effects. One patient developed a transient macular rash which might have been due to "Luminal". Thiouracil is rapidly absorbed and excreted. The blood level is usually about three milligrammes

per centum on the doses referred to. Sedatives at night, thiamin, niacin, cevitamic acid and yeast were given to all patients. Treatment was carried out for four to seven weeks and a maintenance dose is advocated for two months or more.

#### Large Gastric Ulcers.

FREDERICK STEIGMANN (*The American Journal of Digestive Diseases*, March, 1943) states that for many years it has been the conviction of a few clinicians that every gastric "ulcer" should be looked on with concern and watched closely. He proceeds to discuss some considerations on the diagnosis of large gastric ulcers and implications as to treatment. The author states that though all large gastric ulcers are not malignant, many of them are, and, therefore, it is dangerous to treat them medically. The hazards confronting the clinician, radiologist and gastroscopist in the differential diagnosis of large gastric ulcers are great and need reemphasis. The results of the author's study of large gastric ulcers, extending over a period of ten years, support similar previous reports, showing that there is nothing in the history, physical examination, laboratory tests, findings on X-ray study, gastroscopy, or in the results of medical treatment which will unfailingly differentiate a benign from a malignant gastric ulcer, and in some cases only the histological examination of the excised lesion will lead to correct diagnosis. The therapeutic implications suggest the advisability of resecting every large gastric ulcer, because large benign ulcers usually heal poorly and often complications demand operative interference, because of the danger of misdiagnosis of a malignant lesion as a benign one, because of the liability to recurrence of apparently healed lesions, and because of the serious doubt in the author's opinion that there is such a thing as complete healing of a large gastric ulcer on medical treatment. The author advises excision as the best treatment of a large gastric ulcer, as this will not only effect a cure when other methods fail, but it will prevent complications and may save the patient's life in those many cases in which carcinomatous changes are present.

#### Coronary Thrombosis in Youth.

W. S. MILLER AND W. W. WOODS (*British Heart Journal*, April, 1943) describe the case of an apparently healthy young man, aged twenty-two years, who died of sudden cardiac failure and was found to have an organized clot in one of his coronary arteries and ischemic fibrosis of the myocardium. They have collected from the literature eleven other cases of coronary arterial occlusion in youth.

#### Examination of the Rapid Heart.

L. S. LUTON (*The Journal of the American Medical Association*, November 13, 1943) reports that while examining a man whose heart action was rapid he asked the man to lean forward. The patient responded by bending to an angle of 90°, when the rate suddenly slowed, apparently because of vagus influence. This observation has been verified in many cases of tachycardia. The author suggests that this posture may be useful in clinical examinations.



## British Medical Association News.

### ANNUAL MEETING.

THE annual meeting of the Victorian Branch of the British Medical Association and of the Medical Society of Victoria was held at the Royal Australasian College of Surgeons, Spring Street, Melbourne, on December 1, 1943, Dr. J. A. CAHILL, the President, in the chair.

### DEATH OF MEMBERS ON ACTIVE SERVICE.

The Medical Secretary read the names of those members of the Branch who had died on active service during the war: Major Eric Ballhache, Flight-Lieutenant W. R. Brodrick, Major J. F. Chambers, Lieutenant-Colonel Eric Cooper, Captain W. G. Cuscaden, Captain J. F. Davies, Captain C. S. Donald, Surgeon Lieutenant J. M. Gaskell, Captain C. J. R. Joyce, Captain G. L. Lindon, Flight-Lieutenant F. H. Lord, Major H. F. G. McDonald, Major N. V. McKenna, Lieutenant-Colonel C. P. Manson, Captain A. D. Mawson, Captain D. J. Shale, Major Z. Schwartz, Flight-Lieutenant Stuart Thomson, Captain S. I. Weir. Members stood in silence in their memory.

### ELECTION OF OFFICE-BEARERS AND MEMBERS OF COUNCIL.

The Medical Secretary announced that the Council had elected the following office-bearers:

*President:* Dr. D. Roseby.  
*Senior Vice-President:* Dr. John Dale.  
*Junior Vice-President:* Professor P. MacCallum.  
*Chairman of Council:* Dr. H. C. Colville.  
*Honorary Treasurer:* Dr. C. H. Mollison.  
*Honorary Secretary:* Dr. Roy Watson.  
*Honorary Librarian:* Dr. Guy Springthorpe.

The Medical Secretary announced that the following had been elected members of the Council by the general body of the members: Dr. A. E. Brown, Dr. C. Byrne, Dr. H. C. Colville, Dr. John Dale, Dr. D. M. Embelton, Dr. J. H. Gowland, Dr. J. S. Green, Dr. L. W. Johnston, Dr. E. I. Littlejohn, Professor P. MacCallum, Dr. F. K. Norris, Dr. K. Smith, Dr. R. Southby, Dr. D. Thomas.

The Medical Secretary announced that the following had been elected by the subdivisions: Dr. H. Boyd Graham, Dr. Guy Springthorpe, Dr. H. Searby, Dr. F. E. McAree, Dr. E. M. Ettelson, Dr. M. H. Box, Dr. L. A. Neal, Dr. Roy Watson, Dr. J. A. Cahill, Dr. B. D. Fethers, Dr. F. J. Bonnin, Dr. G. V. Davies, Dr. R. Knox, Dr. F. W. Grutzner, Dr. W. Sloss, Dr. W. E. Harrison, Dr. T. H. Paterson, Dr. D. Carter.

The Medical Secretary announced that the *ex-officio* members of the Council were: Dr. F. L. Davies, Dr. C. H. Mollison, Dr. J. Newman Morris, Dr. D. Roseby (Trustees of the Medical Society of Victoria), Dr. J. P. Major (Director, Australasian Medical Publishing Company, Limited).

The representative of the Victorian Medical Women's Society was Dr. Eileen FitzGerald.

Dr. W. G. D. Upjohn was coopted to the Council.

### ANNUAL REPORT OF THE COUNCIL.

On the motion of Dr. John Dale, seconded by Dr. H. C. Colville, the report of the Council which had been circulated among members was received and adopted. The report is as follows.

The Council of the Branch and the committee of the society present the sixty-fourth annual report of the Branch and the eighty-eighth of the society.

In accord with the wishes of the Commonwealth Government for the observance of economy and to conserve paper, this report, compared with those of former years, has been abbreviated, although the work of the subcommittees and sections continued during the year.

### Election.

At the annual meeting held last December, the following members of the Council and of the committee were elected: Professor R. Marshall Allan, Dr. Arthur Browne, Dr. Charles Byrne, Dr. H. C. Colville, Dr. John Dale, Dr. D. M. Embelton, Dr. John H. Gowland, Dr. John S. Greer, Dr. Euan I. Littlejohn, Professor P. MacCallum, Dr. F. Kingsley Norris, Dr. D. Roseby, Dr. Kenneth Smith and Dr. Douglas Thomas.

The following were elected to represent the subdivisions: Dr. F. J. Bonnin, Dr. M. H. Box, Dr. J. A. Cahill, Dr. D. A. Carter, Dr. G. V. Davies, Dr. E. M. Ettelson, Dr. B. D.

Fethers, Dr. H. Boyd Graham, Dr. F. W. Grutzner, Dr. W. E. Harrison, Dr. R. B. Knox, Dr. F. McAree, Dr. L. A. Neal, Dr. J. H. Paterson, Dr. Henry Searby, Dr. W. Sloss, Dr. Guy Springthorpe and Dr. Roy Watson.

Under Rule 9 the Council elected Dr. Eileen FitzGerald, nominated by the Victorian Medical Women's Society.

The following are *ex-officio* members: the Trustees of the Medical Society of Victoria, Dr. F. L. Davies, Dr. C. H. Mollison, Dr. J. Newman Morris, and the representative of the Australasian Medical Publishing Company, Limited, Dr. J. P. Major. On the death of Dr. R. H. Fetherston, who was a Trustee of the Medical Society, Dr. D. Roseby was elected a Trustee by a general meeting of the Branch.

*Cooption.*—At its first meeting the Council coopted Dr. W. D. G. Upjohn, and in March Professor Arthur Amies was coopted.

The Council elected the following office-bearers:

*President:* Dr. J. A. Cahill.  
*Vice-Presidents:* Dr. D. Roseby and Dr. John Dale.  
*Chairman of Council:* Dr. H. C. Colville.  
*Honorary Secretary:* Professor R. Marshall Allan.  
*Honorary Treasurer:* Dr. C. H. Mollison.  
*Honorary Librarian:* The late Dr. R. H. Fetherston was elected at the beginning of the year, and on his death Dr. Guy Springthorpe was elected.

The Executive consisted of the President and other office-bearers.

### Attendances at Council Meetings.

Eleven ordinary meetings and three special meetings of the Council were held. The following shows the attendances:

Dr. M. H. Box .. ..	14	Dr. D. M. Embelton ..	8
Dr. F. L. Davies .. ..	14	Dr. F. McAree .. ..	8
Dr. H. Boyd Graham ..	14	Dr. Kenneth Smith ..	8
Dr. H. C. Colville .. ..	13	Dr. W. E. Harrison ..	7
Dr. D. Roseby .. ..	13	Dr. Euan I. Littlejohn ..	7
Dr. Guy Springthorpe ..	13	Dr. R. H. Fetherston ..	6
Dr. John Dale .. ..	12	Dr. Eileen FitzGerald ..	6
Dr. E. M. Ettelson .. ..	12	Dr. Arthur Brown ..	5
Dr. B. D. Fethers .. ..	12	Dr. W. D. G. Upjohn ..	5
Dr. J. H. Gowland .. ..	12	Dr. J. Newman Morris ..	4
Dr. Roy Watson .. ..	12	Dr. G. V. Davies .. ..	2
Dr. Charles Byrne .. ..	11	Dr. J. P. Major .. ..	2
Dr. J. A. Cahill .. ..	11	<sup>1</sup> Prof. Arthur Amies ..	2
Dr. L. A. Neal .. ..	11	<sup>2</sup> Dr. F. Kingsley Norris ..	1
Prof. R. Marshall Allan ..	10	Dr. Henry Searby .. ..	1
Dr. D. A. Carter .. ..	10	Dr. W. Sloss .. ..	1
Prof. P. MacCallum .. ..	10	Dr. F. J. Bonnin .. ..	0
Dr. J. H. Paterson .. ..	10	Dr. F. W. Grutzner ..	0
Dr. John Green .. ..	9	Dr. R. B. Knox .. ..	0
Dr. C. H. Mollison .. ..	9	<sup>3</sup> Dr. D. J. Thomas .. ..	0

The highest attendance at any one meeting was 29, and the average attendance was 23.

### Appointment of Subcommittees.

The following subcommittees were appointed by the Council (the first-named acting as convenor of the subcommittee):

*Ethics:* Dr. Davies, Dr. Green, Dr. Morris, Dr. Smith, Dr. Watson and the Executive.

*Finance, Housing and Library:* Dr. Mollison, Dr. Fetherston and Dr. Smith, Dr. Springthorpe taking the place of Dr. Fetherston on the latter's death.

*Legislative:* Dr. Roseby, Dr. Colville, Dr. Dale, Dr. Davies, Dr. Gowland, Dr. Green, Dr. Littlejohn, Dr. Graham and Professor Marshall Allan.

*Organization:* Dr. Roseby, Dr. Cahill, Dr. Box, Dr. Brown, Dr. Dale, Dr. Fethers, Dr. FitzGerald, Dr. Gowland, Dr. Graham, Dr. Green, Dr. Ettelson, Dr. Littlejohn, Dr. McAree, Dr. Neal, Dr. Searby, Dr. Smith, Dr. Springthorpe, Dr. Watson, Professor Marshall Allan and representatives of the country subdivisions. Dr. Byrne and Dr. Colville and Professor Amies and Professor MacCallum were coopted during the year.

*Science:* Professor MacCallum and Professor Marshall Allan, Dr. Graham, Dr. McAree, Dr. Searby and Dr. Springthorpe.

*Hospital:* Dr. Graham, Dr. Colville, Dr. Embelton, Dr. Ettelson, Dr. Neal, Dr. Smith and Professor Marshall Allan.

*Correspondence:* Professor Marshall Allan and Dr. Colville.

*Workers' Compensation:* Dr. Byrne, Dr. Colville, Dr. Gowland, Dr. Roseby and Dr. Searby.

*War Emergency:* Dr. Cahill, Dr. Gowland, Dr. Littlejohn, Dr. Neal and Dr. McAree.

<sup>1</sup> Appointed during the year.

<sup>2</sup> Australian Imperial Force.



**Branch Convocation.**

Convocation did not meet during the year.

**Membership Roll.**

The number of members on the roll at October 31, 1943, was 1,625, which is 88 more than last year. One hundred and twenty-nine names were added (108 by election, 12 members were reinstated by payment of arrears, 9 members were transferred from other States) and 41 names were removed (18 by death, 4 by resignation, 12 by transfer to other States, and 7 members allowed their subscriptions to fall into arrears).

Honorary medical members now number 37.

Honorary student associates number seven.

Provisional members number eleven.

Death of the following members and former members is recorded with regret: Dr. A. Kemp Bishop, Dr. A. G. Black, Dr. W. E. Brunskill, Dr. F. B. Crawford, Dr. Val. Crowe, Dr. Hugh Currell, Dr. J. E. J. Deane, Dr. P. Ward Farmer, Dr. R. H. Fetherston, Dr. A. M. Ford, Dr. James Eadie, Dr. Andrew Grant, Dr. H. Cairns Lloyd, Dr. J. S. Martin, Dr. Neil McColl, Dr. J. E. Nihill, Dr. B. H. Quinn, Dr. M. W. Ratz, Dr. F. M. Read, Dr. R. G. Reid, Dr. E. N. Scott, Dr. A. A. Weir.

**Roll of Honour.****Died on Service.**

Major Eric Bailhache, Flight-Lieutenant W. R. Brodrick, Major J. F. Chambers, Lieutenant-Colonel Eric Cooper, Captain W. G. Cuscaden, Captain J. F. Davies, Captain C. S. Donald, Surgeon Lieutenant J. M. Gaskell, Captain J. C. R. Joyce, Captain G. L. Lindon, Flight-Lieutenant F. H. Lord, Major H. F. G. McDonald, Major N. V. McKenna, Lieutenant-Colonel C. P. Manson, Captain A. D. Mawson, Captain D. J. Shale, Major Z. Schwartz, Flight-Lieutenant Stuart Thomson, Captain S. I. Weir.

**Hospital Ship Centaur.**

It has been decided to place in the foyer of the Medical Society Hall a memorial in the form of a wall plaque in memory of the personnel of the hospital ship *Centaur*, which was torpedoed off Brisbane on May 14, 1943.

**Missing on Service.**

Surgeon Commander J. R. Hasker, Surgeon Lieutenant-Commander F. H. Genge, Surgeon Lieutenant W. J. McLaren-Robinson, Captain J. F. Park, Surgeon Lieutenant-Commander E. M. Tymms.

**Prisoners of War.**

A list of prisoners of war was published in the last annual report and remains unchanged.

**Honours Conferred by His Majesty the King for Services Rendered during the Present War.**

*C.B.E.*: Brigadier H. C. Disher, Brigadier H. G. Furnell, D.S.O., Colonel J. G. Hayden, Brigadier W. W. S. Johnstone, D.S.O., M.C., and Colonel N. L. Speirs.

*D.S.O.*: Lieutenant-Colonel W. W. Lempiere, Brigadier F. K. Norris and Major F. Douglas Stephens.

*O.B.E.*: Colonel C. W. B. Littlejohn, M.C., and Lieutenant-Colonel J. Glyn White.

*M.B.E.*: Lieutenant-Colonel J. O. Smith and Lieutenant-Colonel Ian Wood.

*D.S.C.*: Surgeon Lieutenant-Commander E. M. Tymms.

*M.C.*: Captain J. F. Connell.

**Meetings of the Branch.**

As the lecture room at the Medical Society Hall is still occupied by the book and sewing sections of the Red Cross Society, the Branch meetings have been held at the Royal Australasian College of Surgeons, and the Branch Council expresses its gratitude to the Council of the College for its generosity in making the lecture hall available.

March: A discussion on the future of medical practice, the President and the Senior Vice-President being the opening speakers.

April: "The Syrian Campaign", Brigadier F. Kingsley Norris.

May: "Some Wartime Medical Observations during a Recent Visit to Great Britain and the United States of America", Dr. J. Newman Morris.

June: A symposium on "Aviation Medicine", at which the speakers were Flight-Lieutenant D. H. LeMessurier, Professor R. D. Wright, Dr. T. a'B. Travers, Flight-Lieutenant D. F. Buckle, Dr. N. E. H. Box, and Flight-Lieutenant W. J. Simmonds. (This meeting was held in the Department of Physiology, University of Melbourne.)

July: "Medical Work in its Varying Aspects and Life in General in North India", Dr. E. W. Gault.

August: "Upper Respiratory Tract Infection, with Particular Reference to the Problems of Prevention", Dr. F. M. Burnet.

October: The tenth Sir Richard Stawell Oration: "The Mosquito: A Teacher of Medicine", Dr. S. F. McDonald.

November: "Health and the Gold Standard", Dr. John Dale.

**Death of Dr. R. H. Fetherston.**

Following the death of Dr. R. H. Fetherston, the Council at its meeting on June 23, 1943, resolved: "That the Council of the Victorian Branch of the British Medical Association records with profound regret the death of Richard Herbert Joseph Fetherston, M.D. A member of the Branch since 1888, he was its President in 1911 and its Honorary Librarian from 1935 until his death, and in 1935 was appointed a Vice-President of the Association. He rendered signal service to the Association in Australia as a member of the Branch Council and the Federal Committee, and a director of the Australasian Medical Publishing Company, the British Medical Insurance Company of Victoria and the British Medical Agency of Victoria, and was largely responsible for the establishment of those bodies. He was also a Trustee of the Medical Society of Victoria and the Branch Income Insurance Fund. To the people of Australia he gave many years of work of the highest quality, both in his capacity as a private medical practitioner, as Medical Officer of Health to the city of Prahran, and as Director-General of Medical Services in the war of 1914-1918."

**Award of Gold Medal to Dr. C. H. Mollison.**

The Federal Council of the British Medical Association in Australia, at its meeting in March, 1943, unanimously resolved to award the gold medal of the Association to Dr. C. H. Mollison. The medal was presented to Dr. Mollison by Sir Henry Newland at a luncheon held in his honour on August 25, 1943, when reference was made to the great services he had rendered to the medical profession in Australia for a period of more than fifty years.

**Branch Convention.**

A convention of representatives of various organizations with the Council of the Victorian Branch of the British Medical Association was held on Friday, June 11, and Saturday, June 12, 1943. The views of the convention on the future of medical practice were expressed in a series of resolutions which will form the basis for a meeting of Branch convocation in 1944 to determine the policy of the Branch on the matter.

**Organization Fund.**

By a unanimous decision of a general meeting held in March the membership subscription was increased by one guinea to provide for the establishment of an organization fund.

**Business of Council.**

Throughout the year the foremost activity of the Council and of the Organization Subcommittee has been the discussion and preparation of plans in relation to the future of medical practice, and members of the Branch have been kept informed through the columns of *THE MEDICAL JOURNAL OF AUSTRALIA* and by the issue of news letters by the Council.

Attempts by the Liquid Fuel Control Board to compel medical practitioners to use "wet alcohol" in their motor-cars were successfully opposed.

In view of the tremendous burden being placed on the practising profession by demands for medical certificates, many of them not related to the medical needs of patients, government departments and employers have been urged to accept statutory declarations from employees and other persons in lieu of medical certificates.

Consideration has been given to the question of the rehabilitation of medical officers serving in His Majesty's Forces, and, at the instigation of the Council, a conference on the matter was held with the Melbourne Permanent Post-Graduate Committee and the medical directors of the services.

During the year permission was given for the formation of a preventive medicine group, membership of which is open to all members of the Branch interested in the subject.

A deputation from the Council waited upon the Honourable the Premier on October 20, 1943, and stressed to him the urgent need for the provision of more hospital accommodation in Victoria, and requested him to convene a conference of interested parties as soon as possible.

A bill to establish a ministry of health is at present before Parliament, and, prior to its introduction, representations were made to the Government stressing the opinion of the medical profession that the control of the new department should be by a technical commission, predominantly medical, under the Minister of Health. It is not yet known what form the legislation will finally take.

#### Federal Council.

The Federal Council met in Melbourne in March and August. Full reports of the proceedings appeared in *THE MEDICAL JOURNAL OF AUSTRALIA* of April 24 and October 2, 1943.

The Branch Council entertained members of the Federal Council at luncheon during the meetings.

#### The Library of the Medical Society of Victoria.

Following the death of Dr. R. H. Fetherston, Dr. Guy Springthorpe was appointed Honorary Librarian.

Members of the Library Advisory Subcommittee are thanked for their valuable assistance in the selection of new books, and thanks are tendered to the following for presentations to the library: Dr. S. E. Humphreys, Dr. E. Graeme Robertson, Dr. N. T. Hannaford Schafer, Dr. W. D. G. Upjohn, and the Editor of *THE MEDICAL JOURNAL OF AUSTRALIA*.

#### On behalf of the Council,

J. A. CAHILL, President.

R. MARSHALL ALLAN, Honorary Secretary.

C. H. DICKSON, Medical Secretary.

#### INSTALLATION OF THE PRESIDENT FOR 1944.

Dr. J. A. Cahill installed Dr. D. Roseby as President for the ensuing year. Dr. Roseby thanked the members for his election. He said that in the past he had frequently espoused lost causes. They had at the time seemed important, but he knew that they were not nearly so great as the problems which the Branch would have to face in the near future. A testing time was coming, in which the profession would have to maintain its honour and its dignity. In all humility he hoped that in occupying the chair he would not fail those who had reposed trust in him.

#### PRESIDENT'S ADDRESS.

Dr. J. A. Cahill then read his retiring President's address (see page 1).

#### VOTES OF THANKS.

The Editor of *THE MEDICAL JOURNAL OF AUSTRALIA* proposed and Dr. Gerald Weigall seconded a vote of thanks to Dr. Cahill for his address and to Professor R. Marshall Allan, who was retiring from the office of Honorary Secretary and from the Council, for his services to the Branch. The vote of thanks was carried by acclamation.

## Medical Practice.

### ABDOMINAL PREGNANCY.

THE Maternal Mortality Investigation Committee associated with the Department of Public Health of New South Wales has drawn up a statement on abdominal pregnancy, which has recently caused a number of deaths. It is published at the request of Dr. E. Sydney Morris, Director-General of Public Health.

There have been recently within the metropolitan area a number of cases of abdominal pregnancy associated with a fatal issue. This is an unusual condition. It is often unsuspected and involves a knowledge of principle and technique in treatment on which it is thought medical prac-

tioners might appreciate some practical advice and help. The committee presumes to this extent because the condition has major and unusual complications which are often discovered only when abdominal section has been undertaken on a wrong diagnosis—namely, twisted ovarian cyst or acute abdomen. The doctor is immediately faced with a surgical problem of which he has had, perhaps, no previous experience, and for which he may be unable to summon the necessary surgical assistance within the time limit of the operation.

#### The Development and Course of Abdominal Pregnancy.

Most cases are secondary abdominal pregnancies—that is, cases which have started off as ectopic gestations, ruptured either into the broad ligament or peritoneal cavity, but in which the fetus has continued to develop towards a stage approaching full term. Primary abdominal pregnancy is a doubtful entity in which the fertilized ovum is implanted in the first place on the peritoneum.

Where the abdominal pregnancy continues to develop the fetus is contained within its membranes, and in place of a uterine decidua and muscle wall, is surrounded with lamellated fibrin and tissues from neighbouring structures, such as the broad ligament, peritoneum, pelvic wall, uterus, bladder, rectum, intestine, omentum, liver, spleen and stomach. This sac varies in thickness depending on the amount of fibrin. The placenta is spread out over the tissues which are adjacent to its first point of development, is usually thin, but otherwise like a uterine placenta. The blood vessels in the neighbourhood of the placenta are enormously dilated and many new ones are formed. This is especially so in the case of the omentum.

If the abnormal pregnancy goes on to term, false or spurious labour sets in, associated with pains similar to those occurring in the early stages of normal labour. This may last for some hours or days and is soon followed by the death of the child. After the death of the fetus the placental circulation gradually becomes abolished, the amniotic fluid is absorbed, and the fetal sac retracts, causing a change in size of the abdomen.

After its initial shrinking the tumour may remain stationary in size for some years. It occasionally happens, however, that this tumour becomes infected from the bowel leading to suppuration. This may cause peritonitis or a localized abscess. In the latter case it may discharge some of its contents through the abdominal wall or even into the bowel (most likely the rectum).

The child is usually dead. If born alive, the mortality in the first year of life is about 60%. Approximately 50% show malformation.

#### The Diagnosis.

The abnormality has been seldom detected in the past until false labour supervenes, unless the doctor's attention is particularly directed to the previous history of the case. The patient presents the usual symptoms of pregnancy, except that she suffers more pain and feels the fetal movements more acutely than usual. The pain is partly due to stretching and partly to traction upon adhesions which have been formed between the sac and the various abdominal organs.

There has sometimes been a history suggestive of an ectopic gestation or threatened abortion in the first three months. This has "settled down", and the patient has "carried on".

Later in pregnancy it may be suspected if the uterus is found smaller than it should be for the duration of the pregnancy, the fetus in its sac constituting, of course, the greater part of the abdominal enlargement. More frequently, however, the small uterus will be mistaken for a fibroid or ovarian cyst.

The fetus can be palpated more readily than is usual, and the movements may be more painful. Extreme ease of palpation should always suggest the diagnosis: the fetus seems to lie just under the skin.

X rays may be of assistance; particularly if the services of a specialist in obstetric radiology are available.

The symptoms and signs of an acute abdomen (for example, sudden internal hemorrhage) may ultimately be the basis of a diagnosis. In some cases, as stated earlier, the condition may be unsuspected until laparotomy is performed.

#### The Treatment.

Once the diagnosis of abdominal pregnancy is made, it is, generally speaking, dangerous to defer operation. The reasons for postponing operation in some cases are:

1. The desire to obtain a viable child—a doubtful possibility with a considerable risk.

2. The fact that after death of the foetus, shrinking of the placenta and sac with thrombosis in the vascular channels between the placenta and abdominal organs may facilitate the operation. Six to eight weeks after death of the foetus should be the limit. The Aschheim-Zondek test will help you here.

#### The Technique of the Operation: Haemorrhage is the Chief Risk.

The sac is incised, avoiding the placenta if possible, and the foetus extracted. Tie and cut the cord close to the placenta, leaving the placenta and sac *in situ*. Close the abdominal incision without drainage.

This is the preferable course, even in cases where one may be tempted to make a complete operation of it by removing the placenta. As soon as the peeling off of the placenta is begun, furious haemorrhage may occur, which is not stopped by the usual clamps, suture or even packing.

The blood vessels running into the rectum, sigmoid, small intestine and omentum are so thin-walled that they seem to have only two layers of cells, breaking under the lightest touch and instantly flooding the field with blood.

With the above treatment, most of the patients recover promptly, the placenta is in great part resorbed, or at least converted into an innocuous mass which can be removed later, if indicated, with far less danger of haemorrhage.

Mursupialization of the sac is not recommended.

The post-operative course is often marked by a rise in temperature, even when infection is absent. This is probably due to absorption of blood.

#### Transfusion.

As in all cases of suspected or actual haemorrhage, blood typing, donors and other facilities should be ready to hand, and the transfusion given early when it is necessary.

### Correspondence.

#### THE SERVICES AND CIVILIAN PRACTITIONERS.

SIR: The Directors-General of Medical Services, in their letter of November 20, are to be commended for their warning against complacency, as far too many people seem to have the idea that our full effort to defeat the enemy is no longer needed.

While realizing only too well the truth of most of the opinions expressed in the letter, experience and discussion with service and civilian officers make it clear that some aspects of the letter merit further consideration. The questions following are asked in no carping spirit, but in an attempt to aid the total war effort.

##### I. On the Service Side.

Are all members of the services (subject, of course, to the necessities of tactical situations) receiving a fair deal? Do some young officers spend very much time and the worst conditions of service while their more fortunate colleagues occupy "cushy" base jobs, military or civil?

As far as possible, all should be treated alike, and this should not be rendered impossible by lack of flexibility of the medical service or retention of outmoded "red tape" methods. It has been said (and some think with justice) that no young medical officer who is fit should have a base job in the air force until he has had a period of active service with the army or navy. The following question also is pertinent: Has not the time arrived for the institution of a well-organized post-graduate service on the lines of the Army Educational Service? Many young medical officers are becoming desperate, as they feel they are rapidly forgetting most of their recently acquired medical knowledge.

##### II. On the Civilian Side.

Is there justification for criticism with regard to the constitution of medical coordination committees? Speaking generally, there are various "vested" interests, service and civilian, represented on these committees. If there were equal representation of these interests on the committees and a chairman with wide experience of private practice and a good service record (and responsible to no sectional organization), sounder discussions might be possible.

#### III. Service and Civilian Cooperation.

Are not the arrangements in paragraph 10 of the Directors-General's letter for the purpose of cooperation somewhat inadequate? If, in every area where there are service and civilian medical personnel, a committee such as suggested in section II were set up, much better service could be provided, both for the services and civilians.

Yours, etc.,

R.M.O., First Australian Imperial Force.

South Queensland.  
Undated.

#### WHY GLORIFY MURDER?

SIR: Recently a Sydney commercial station broadcast "The Sacred Flame", a play of evil influence, in which the plot revolved around a murderess (an elderly mother), the victim (her incurable invalid son paralysed after crashing), his errant wife—pregnant to her paramour (the invalid's brother), a nurse and the family doctor. The play—well produced and very well acted—finished on a note of conspiracy between doctor, nurse, murderess (a poisoner at that!) and all concerned to hush up the deliberate murder—all apparently in the cause of the sacred flame of "love".

Subversive of all ideals of British law and justice, unethical, unchristian and pagan, it was a sorry business, and one cannot congratulate those who chose the play for public entertainment, nor the authorities who passed it for general broadcast. Since the first world war there have been many British mothers, wives and sisters who have become devoted "slaves" to their permanently incurable invalid men, and after this war there will be many more. In fact, since the "blitz" on England, one might add husbands to the list who will gladly care for their incurably crippled wives. One can imagine the tortured feelings of permanently invalidated service personnel when listening to this broadcast.

The play also was a mephitic slander on the medical profession and on the noble women who for years before and after Florence Nightingale have ornamented the nursing profession, and would tend to lessen public confidence in these professions. Recently a public inquiry was held concerning the effects of "horror films" on impressionable children. Why strain at the gnat when a camel of this size is allowed to pollute the air?

Yours, etc.,

KEVIN BYRNE.

"Lakemba Cottage",  
Lakemba,  
New South Wales.  
November 26, 1943.

#### THE SURGICAL TREATMENT OF DUCTUS ARTERIOSUS.

SIR: Some interest is being taken at this hospital in the question of surgical closure of the patent ductus arteriosus in certain cases of congenital heart disease.

We have recently submitted two such patients to operation with successful results, and we are anxious to investigate further examples of this type of congenital malformation.

I am therefore asking if you will be kind enough to publish this information in the hope that some of your readers may feel disposed to send children to this hospital who may benefit by this procedure. Full clinical details will be sent to any doctor who refers a case to our clinic.

Yours, etc.,

R. G. ROBINSON,

Acting Medical Superintendent.

Royal North Shore Hospital of Sydney,  
December 11, 1943.

#### BLACK OAT SEEDS AS A CAUSE OF DISEASE.

SIR: To the list of cases of irritation or actual disease due to black oat seeds I would like to add two. The first was a man who developed *otitis media*, and suppurative mastoiditis three weeks later. The seed in this case was removed after two days of earache and deafness drove him to seek attention. The second case was a girl of six years with purulent conjunctivitis of the right eye, from the upper fornix of which I removed a seed. The mother was certain



it must have been there for the duration of the complaint, namely, ten days.

Another interesting case was due to a small black ant which had got into the lower fornix of the right eye of a girl, aged ten years. Removal was difficult owing to the ant's claws gripping the conjunctival surface, and the pain and reaction for forty-eight hours were severe.

Yours, etc.,

F. J. KELLEHER.

Templar Street,  
Forbes.

New South Wales.  
December 14, 1943.

#### THE FUTURE OF MEDICAL PRACTICE.

SIR: Much as we have heard and read "about it and about", it seems to me that the essential fact in this national problem has, in effect, escaped notice—certainly to have been inadequately stressed. A very widespread and determined effort is being made to impose on the medical profession an economic and social system—a "salaried medical service"—which, in effect, is socialism. The right to individual bargaining in its "social contracts" with the community at large (abrogation of which is the essence of socialism) is to be replaced at a stroke by State control and direction. This may be all right. As a lifelong protagonist of a wide extension of State control of essential national interests, I would myself favour a great extension of control by the State of the machinery of medical treatment on the lines of the Commonwealth and State health departments—administered as well as directed primarily by medical men. But a socialized medical profession within a capitalistic world seems an anomaly. Socialism on a national scale is a fair issue. But it seems obvious that the medical profession will not even examine the undoubted advantages of medical practice freed from the loathsome task of collecting fees and from the drudgery of a twenty-four-hour day and a seven-day week, and so forth, while they feel that they are to be the guinea-pigs in a one-sided experiment in socialism. Personally, I can see no reason in the world why a medical man should feel himself "bureaucratized" by State payment for treating patients, but most happily and fruitfully freed from sordid anxiety by State payment for doing, say, "research". But most professional men would object to being made the experimental animals in an isolated social experiment, however admirable its purpose. And what are the "patients" going to think about it?

Yours, etc.,

A. G. BUTLER, M.B., B.Ch.

Canberra, A.C.T.,  
December 18, 1943.

#### SUPRAORBITAL NEURALGIA.

SIR: For very many years I have been trying to find out:

1. Why cutting the sensory root of the fifth cranial nerve to try and cure paroxysmal attacks of supraorbital neuralgia did not cure the attacks. Four operations were performed by two different surgeons.
2. Why cutting the sensory root has caused the pain to be not paroxysmal but permanent and perennial.
3. Why these operations have caused the pain to be permanent over the whole distribution of the fifth cranial nerve.

If any of the readers of the journal is able to answer these questions, I would be grateful if he would communicate with me.

Yours, etc.,

ALEC LYONS.

Eaglehawk,  
Victoria,  
December 14, 1943.

#### Naval, Military and Air Force.

##### CASUALTIES.

ACCORDING to the casualty list received on December 20, 1943, Captain A. G. G. Carter, A.A.M.C., South Yarra, who was previously reported to be a prisoner of war, is now reported to have been repatriated.

#### Nominations and Elections.

THE undermentioned have applied for election as members of the New South Wales Branch of the British Medical Association:

Becke, Rex Frederick Allingham, M.B., B.S., 1938 (Univ. Sydney), 158, Faulkner Street, Armidale.  
Barr, Stephen Grimwood, M.B., B.S., 1943 (Univ. Sydney), Royal North Shore Hospital, St. Leonards.

#### Books Received.

"A Pocket Medical Dictionary", compiled by Lois Oakes, S.R.N., D.N. (London and Leeds), assisted by Thomas B. Davie, B.A., M.D. (Liverpool), F.R.C.P. (London). Sixth Edition; 1943. Edinburgh: E. and S. Livingstone. 4" x 3½", pp. 486. Price: 4s. Postage: 3d.

"A New Dictionary for Nurses", compiled by Lois Oakes, S.R.N., D.N. (London and Leeds), assisted by Thomas B. Davie, B.A., M.D. (Liverpool), F.R.C.P. (London). Eighth Edition; 1943. Edinburgh: E. and S. Livingstone. 4" x 3½", pp. 502. Price: 4s. Postage: 3d.

#### Medical Appointments: Important Notice.

MEDICAL PRACTITIONERS are requested not to apply for any appointment mentioned below without having first communicated with the Honorary Secretary of the Branch concerned, or with the Medical Secretary of the British Medical Association, Tavistock Square, London, W.C.1.

**New South Wales Branch** (Honorary Secretary, 135, Macquarie Street, Sydney): Australian Natives' Association; Ashfield and District United Friendly Societies' Dispensary; Balmalm United Friendly Societies' Dispensary; Leichhardt and Petersham United Friendly Societies' Dispensary; Manchester Unity Medical and Dispensing Institute, Oxford Street, Sydney; North Sydney Friendly Societies' Dispensary Limited; People's Prudential Assurance Company Limited; Phoenix Mutual Provident Society.

**Victorian Branch** (Honorary Secretary, Medical Society Hall, East Melbourne): Associated Medical Services Limited; all Institutes or Medical Dispensaries; Australian Prudential Association, Proprietary, Limited; Federated Mutual Medical Benefit Society; Mutual National Provident Club; National Provident Association; Hospital or other appointments outside Victoria.

**Queensland Branch** (Honorary Secretary, B.M.A. House, 225, Wickham Terrace, Brisbane, B.17): Brisbane Associated Friendly Societies' Medical Institute; Bundaberg Medical Institute. Members accepting LODGE appointments and those desiring to accept appointments to any COUNTRY HOSPITAL or position outside Australia are advised, in their own interests, to submit a copy of their Agreement to the Council before signing.

**South Australian Branch** (Honorary Secretary, 178, North Terrace, Adelaide): All Lodge appointments in South Australia; all Contract Practice appointments in South Australia.

**Western Australian Branch** (Honorary Secretary, 205, Saint George's Terrace, Perth): Wiluna Hospital; all Contract Practice appointments in Western Australia.

#### Editorial Notices.

MANUSCRIPTS forwarded to the office of this journal cannot under any circumstances be returned. Original articles forwarded for publication are understood to be offered to THE MEDICAL JOURNAL OF AUSTRALIA alone, unless the contrary be stated.

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